



The Universal Waste Rule Gets Bigger and Better!

Universal wastes are common hazardous wastes that can be recycled under the universal waste rule (40 CFR 273), eliminating the need to handle, manage, and dispose of them as hazardous wastes. States can choose to adopt all, part, or none of the U.S. Environmental Protection Agency (EPA) universal waste rule and can decide to impose additional requirements. In August 2005, EPA added mercury-containing equipment to the list of universal wastes.

What is a Hazardous Waste?

A waste is a "hazardous waste" if it is on a list found in 40 CFR 261 Subpart D; or if it is ignitable (flashpoint above 140°F), corrosive (pH below 2 or above 12), reactive (unstable under normal conditions), or toxic (leaches toxic chemicals above regulatory levels). You can refer to a product's material safety data sheet (MSDS) to find some of this information.

What Items Are Universal Wastes?

- Universal waste batteries include all batteries that would otherwise be hazardous waste (e.g., many which contain mercury). Lead acid batteries may alternatively be reclaimed under 40 CFR 266 Subpart G.
- Universal waste pesticides include stocks of suspended or canceled pesticides that are part of a recall program, or stocks of

other unused pesticides that are collected and managed as part of a waste pesticide collection program.

- Universal waste lamps include all lamps that would otherwise be hazardous waste, such as some types of fluorescent lamps that contain mercury.
- Universal waste mercury-containing thermostats.
- Universal waste mercury-containing equipment.

What is Mercury-containing Equipment?

The range of items that fall under the classification of universal waste mercury-containing equipment is vast. In general, equipment that contains elemental mercury – the slippery, metallic liquid – “integral to its function...” falls under the classification of a universal waste. These items include: thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches such as light switches in automobiles. One exception is structures that cannot be sealed to prevent releases, such as barometers or manometers with “open original housing.” These items must be treated under hazardous waste regulations (40 CFR 260-279).

How Do I Manage Universal Waste?

Concessioners that are conditionally exempt small quantity generators (CESQG) of hazardous waste are not required to treat items as universal waste so long as the items are taken to an EPA approved recycling or destination facility. Concessioners considered to be CESQGs are those that: 1) generate less than 220 pounds (lbs) of hazardous waste and less than 2.2 lbs of acutely hazardous waste per calendar month, and 2) accumulate and store less than 2,200 lbs of hazardous waste or 2.2 lbs of acutely hazardous waste at any one time. While CESQGs are not required to treat items as universal wastes, it is considered a best management practice to do so.

Concessioners that are not CESQGs are required to treat items as universal waste or hazardous waste. Requirements under universal waste regulations include the following:

1. Label containers storing the universal wastes with one of the following phrases:
 - a. **For mercury-containing equipment:** “Universal Waste Mercury-Containing Equipment,” “Waste Mercury-Containing Equipment,” or “Used Mercury-Containing Equipment.”
 - b. **For certain batteries:** “Universal Waste Batteries,” “Waste Batteries,” or “Used Batteries.”

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Mad as a Hatter with Mercury

Remember the mad hatter in Lewis Carroll's *Alice in Wonderland*? Although this was a fictional piece of work, there really were “mad hatters” when felt hats were all the rage. Hatters worked with mercury – and ended up being poisoned with it, resulting in symptoms such as depression, anxiety, slurred speech, and tremors.

Mercury is a very toxic substance that can persist in the environment for years. It causes developmental and nervous system problems in humans and is also harmful to animals. By designating many items that contain mercury (e.g., fluorescent lamps, mercury thermometers, and mercury-containing equipment) as a type of universal waste, EPA's objective was to encourage proper recycling of these items by removing some of the burdens of strict hazardous waste management requirements.



Crater Lake National Park, Oregon

GreenLine

GreenLine is an official publication of the National Park Service Concession Program. The newsletter provides a forum in which the NPS can share information with NPS staff and concessioners about the Concession Environmental Management Program, current environmental requirements, and best management practices; it also identifies resources available to improve concessioner environmental performance and highlights success stories.

Guest articles have been reviewed by the NPS Concession Environmental Management Program and, if required, edited in collaboration with the original author.

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Notice: This newsletter is intended as an educational tool for businesses providing visitor services in national parks. Every effort has been made to ensure the information presented is accurate. However, the content does not constitute a complete reference to Federal, state, or local laws nor does it constitute National Park Service rulemaking, policy, or guidance. Relying solely on the information in the newsletter will not guarantee compliance with applicable regulations. Strategies, procedures, and proposed solutions for compliance issues should be discussed with the appropriate Federal, state, and/or local regulatory agencies; it remains the sole responsibility of operators to determine compliance with regulations. Inclusion in the newsletter is not an endorsement of a particular operator, product, or strategy.

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Dr. Ima Park

For this GreenLine Newsletter issue, we ask our in-house expert, Dr. Ima Park, to help us identify innovative strategies to communicate environmental messages to our guests.

? *My concession operation is doing a lot of great things for the environment. We are reducing our consumption of natural resources, purchasing more environmentally preferable products, and reducing waste. While we communicate environmental messages to our guests by posting signs everywhere, we'd really like some suggestions on ways to "bring it home" to park visitors. We want to help them learn more about their personal environmental impacts and encourage them to pursue their own path towards sustainability. What else can I do?*

Dr. Ima Park:

There are many options and creative techniques for educating park visitors on sustainability. There isn't enough room here to tell you about all of them, but we present two below that you may want to try.

Get Connected with an Interactive Sustainability Display

Provide an "interactive sustainability display" in a place where park visitors typically congregate when visiting your facilities. This can consist of a computer connected to the Internet that brings users to the Ecological Footprint Quiz website (www.myfootprint.org). In less than ten minutes, this website calculates a person's natural resource consumption compared to other individuals and educates the user on additional interesting and eye-popping statistics about their individualized natural resource consumption.

A similar survey called "Eating the Future" is available from <http://tiki.oneworld.net> (then click on "Quizzes") and provides younger children

with an opportunity to determine whether their lifestyle is environmentally sustainable.



Of course, with an interactive sustainability display, you can also create your own website and teach park visitors about your very own sustainability programs.

Promote Carbon-Neutral Programs

Develop a carbon-neutral program. This is a way to counterbalance the impact your operations have on climate change, which is caused primarily by carbon dioxide released from burning fossil fuels such as oil, coal, and gas. In a nutshell, a carbon neutral program involves balancing the carbon dioxide you emit into the air with carbon dioxide you take out of the air. There are organizations that sell "carbon offsets" which result in less carbon dioxide than would otherwise be emitted to help facilitate carbon dioxide balancing. Examples of carbon offsets include planting trees which remove carbon dioxide from the air, funding alternative energy sources such as solar power, and many others.

Because most park visitors travel to your concession operation by plane, train, or car, which are all fuel-consuming modes of transportation, they are contributing to carbon dioxide emissions. By providing park visitors with tools to calculate the amount of carbon dioxide they used to travel to the park and options for purchasing carbon offsets, you can help park visitors understand the true impact of their travel.

Of course, promoting carbon-neutral programs would work best if you can show park visitors how your operation is also participating in or supporting similar programs. You can consider donating to an organization that plants trees or planting trees yourself in a nearby community to help become a carbon-neutral operation.



A few resources on carbon offset programs:

- The CarbonNeutral Company: www.carbonneutral.com/index.asp
- Climate Care: www.climatecare.org
- Carbonfund.org: www.carbonfund.org/site
- TerraPass: www.terrapass.com
- Native Energy: www.nativeenergy.com



The NPS is LEEDing the Way in Sustainable Building Design



In early 2006, twenty-one government agencies, including the Department of the Interior (DOI), signed a memorandum of understanding to commit to sustainably designed buildings. DOI is now working to develop an implementation plan including goals and guidelines to guide the NPS and other DOI bureaus in sustainable building design and construction.

While the NPS awaits formal DOI guidance, it has already begun working to develop NPS-specific goals and policies for both renovation and new building design. Included in the 2006 NPS Management Policies is a statement that renovated and new visitor centers and major visitor service facilities must incorporate LEED (i.e., Leadership in Energy and Environmental Design) standards to achieve –

at minimum – a Silver rating under the U.S. Green Building Council's (USGBC) Green Building Rating System™.

LEED is a nationally recognized benchmark program for green building design that focuses on five key areas of building development: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Credits are accrued based on meeting specific criteria under each of the five key areas. The more credits accrued to a building, the higher LEED rating the building achieves. There are four categories of LEED certification: Certified, Silver, Gold, and Platinum.

Concessioners planning new major visitor service facilities should discuss with the park any requirements to include LEED standards.



RESOURCES:

- Information on the USGBC and the LEED program: www.usgbc.org
- NPS 2006 Management Policies: www.nps.gov/policy/mp/Index2006.htm
- Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding: www.doi.gov/greening/buildings/SustBldgsMOU.pdf

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- c. For certain lamps:** “Universal Waste Lamps,” “Waste Lamps,” or “Used Lamps.”
 - d. For certain pesticides:** “Universal Waste Pesticides,” “Waste Pesticides,” or “Used Pesticides.”
 - e. For mercury thermometers:** Label them as mercury containing equipment (see a. above) or continue to label them as “Universal Waste—Mercury Thermometers,” “Waste Mercury Thermometers,” or “Used Mercury Thermometers.”
2. Ensure the container storing the universal wastes is sound and leakproof and is closed when not being used.
 3. Label the container or individually label each piece of universal waste with the accumulation start date. The accumulation start date is the date the item became a universal waste. For example, the date a used fluorescent lamp is removed from its light fixture would be that lamp's accumulation start date.
 4. Recycle the universal wastes within one year of the accumulation start date.
 5. Train employees who handle universal waste by providing them with information describing proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility. This training may be presented informally, but it should be comprehensive.
- It is recommended that concessioners check with their state to ensure there are not more stringent state requirements related to universal waste management.

RESOURCES:

- *Guidance for Managing Universal Waste* – available from the Concession Environmental Management Program.
- EPA website that includes which states have adopted the federal universal waste rule: www.epa.gov/osw, then click on “Universal Waste.”

Make Sure Your Cathode Ray Tubes Don't Zap Landfills with Toxics!

A cathode ray tube (CRT) is a video display component found in some common electronic items such as televisions and computers. It is typically encased in a glass tube, with the front plate of the unit serving as the display screen. Inside a CRT are many different materials, some of them hazardous. Large amounts of lead and cadmium are typically present in a CRT, and because these are toxic metals, there are questions about whether CRTs must be disposed of as a hazardous waste.

Under a new U.S. Environmental Protection Agency (EPA) rule which is effective January 29, 2007, the EPA clarified that used, unbroken CRTs are not regulated as hazardous waste if they are recycled, reused, or upgraded. The rule also states that CRTs that are broken are not hazardous wastes if recycled. But, because a broken CRT increases the risk of exposure to lead and other toxic metals inside of it, EPA has enacted some additional requirements including:

- Requirements for storing and transporting broken CRTs in containers designed to minimize releases;
- Clearly labeling the contents of containers storing broken CRTs; and
- Recycling broken CRTs within one year of them being broken.

Does My Computer Use CRTs?

The CRT in a desktop computer is usually included in a standalone monitor, but may also be integrated with the computer processing unit to form a complete computer system. Laptop computers and flat screen monitors have a different type of video display unit that does not incorporate a CRT.

RESOURCES:

Information about the new CRT rule: www.epa.gov/epaoswer/hazwaste/recycle/electron/crt.htm

Eyeing Xanterra's 2015 Environmental Vision

Xanterra Parks & Resorts (Xanterra) in Zion National Park was recognized with a 2006 NPS Environmental Achievement Award. It also received an honorable mention through the 2006 Department of the Interior Environmental Achievement Award program. Xanterra demonstrated an exceptional commitment to environmental stewardship through numerous initiatives at its Zion Lodge operations, where it is responsible for providing lodging, food and beverage, and retail visitor services.

Zion Lodge's environmental stewardship efforts are based on Xanterra's 2015 Environmental Vision which identifies company-wide environmental goals based upon the following four general concepts:

- 1) slowing global warming;
- 2) preserving natural resources;
- 3) minimizing hazardous substances; and
- 4) protecting the natural environment.

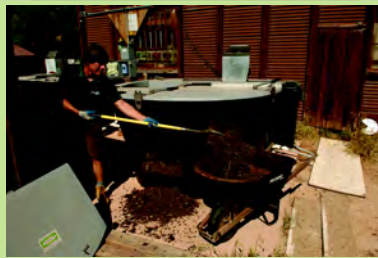
Eight company-wide environmental goals have been set including: decreasing fossil fuel usage by 30 percent, increasing sustainable food purchases by 50 percent, and generating zero hazardous waste.

Xanterra has been working hard to achieve these goals at Zion Lodge. Some of its current accomplishments toward

meeting the company-wide goals for which it was awarded a 2006 NPS Environmental Achievement Award include:

- Reducing over 24,000 gallons of annual diesel fuel use through the conversion of a diesel fuel-fired boiler to an "on-demand" propane-fired system;
- Increasing its renewable energy commitment through the purchase of 667,000 kWh of renewable "Green-e" certified wind power and the installation of an "on-site" 15-kilowatt solar photovoltaic system;
- Installing an interactive display in the main lobby that tracks renewable energy use at Zion Lodge and displays "real-time" on-site solar power generation;
- Installing energy-saving measures such as guest-room occupancy sensors to control room temperature, purchasing ENERGY STAR® qualified appliances, and using compact fluorescent lamps;
- Reducing the use of gasoline in fleet vehicles by purchasing hybrid or fuel-efficient vehicles and two "zero" emission electric maintenance carts, and converting two gasoline maintenance carts to propane;

Xanterra has installed two Earth Tub™ composters.



Zion National Park, Utah

- Installing two Earth Tub™ composters which processed nearly 30,000 pounds of food waste in 2005; the finished compost material was donated to local gardens and nurseries which in turn produce organic fruits and vegetables;
- Providing recycling containers in all employee dormitory rooms as well as hotel guest rooms;
- Selling BIOTA brand Colorado Pure™ Spring Water, which is sold in a compostable NatureWorks® bottle made from corn (PLA); the empty bottles are collected and combined with food waste in the on-site Earth Tub composting system;
- Restoring two acres of non-native grassland to a natural state consisting of rocks, native grasses, and shrubs; and
- Offering sustainable food choices in its restaurant amounting to seven percent of the total menu items.

With ten more years still remaining, Xanterra is well on its way at Zion National Park in reaching its corporate 2015 Environmental Vision environmental goals.

Using Planet EVERgreen to Preserve and Protect

The Doyon/ARAMARK Denali National Park Joint Venture (Doyon/ARAMARK) made a commendable effort in 2005 to help protect Denali National Park and Preserve natural resources for future generations. As a result, it was recognized with an award through the 2006 Department of the Interior Environmental Achievement Award program and an honorable mention through the 2006 NPS Environmental Achievement Award program.

Providing transportation, food, and retail services to Denali National Park and Preserve visitors in an environmentally sensitive manner allowed Doyon/ARAMARK to capitalize on an opportunity to help protect Park resources in a

remote area. Utilizing Planet EVERgreen, an environmental management system (EMS) that was certified to the ISO 14001 standard, Doyon/ARAMARK focused its environmental efforts in eight key categories:

- **Procurement and Purchasing:** Doyon/ARAMARK implemented an environmentally preferable purchasing policy where products purchased included: Easy-Nap napkin dispensers which dispense only one napkin at a time and Earthshell™ food wraps that are biodegradable.
- **Interpretive Programs:** Environmental information is incorporated into interpretive program tours for Park visitors; visitor survey questions are also used to gauge the effectiveness of environmental information provided during bus tours.
- **Education and Training:** Employees receive EMS training and each department has an EMS bulletin



Denali National Park and Preserve, Alaska

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Using Planet EVERgreen to Preserve and Protect

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board highlighting information on EMS objectives and targets. Doyon/ARAMARK also uses innovative EMS training methods for its employees such as creating the “Recycled Toilet Paper,” which highlights all things environmental and is placed in employee restrooms.

- **Culinary Practices:** Doyon/ARAMARK utilizes local and/or organically grown food products for sale at its food and beverage operations. It serves only fish species approved by the Monterey Bay Seafood Watch Program. Locally available food such as Alaska halibut and salmon are also served.
- **Water and Energy Conservation:** Doyon/ARAMARK replaced two copy machines with two ENERGY STAR® qualified machines. Doyon/ARAMARK also replaced five washing machines and electric dryers with five front-loading washing machines and propane-fired dryers.
- **Transportation:** Specialized air filters were installed on 100 buses, reducing particulates, carbon monoxide, and hydrocarbon emissions by 70 percent when using low-sulfur diesel. In addition, all buses follow a low-air pressure program whereby less dust is kicked up when traveling on unpaved roads.
- **Waste Management Reduction:** During 2005, Doyon/ARAMARK worked to increase recycling by 26 percent as compared to 2004 levels. Recycling bins were placed in every employee housing unit and employees and guests were educated on the recycling efforts.
- **Sustainable Building Design:** Doyon/ARAMARK has utilized sustainable design principles in several of its buildings. This includes using biodegradable tectum ceiling tiles made from aspen fibers, Tirex (recycled tires) flooring in entry areas, locally grown spruce for exterior and interior finishes, and bamboo flooring.

Moving forward, Doyon/ARAMARK is assisting the Park in additional interpretive planning efforts and continues to embrace complete implementation of its Planet EVERgreen EMS.

Erasing Footprints in the Tetons

When Jenny Lake Boating became a new Grand Teton National Park concessioner in 2002, it realized that opportunities to restore natural landscapes existed.

An employee and Park ranger dirt parking area had gradually expanded over time and the entire area was void of grass and plants. Additionally, over many years, visitors and employees at Jenny Lake had developed “social trails” or “cow paths,” eroding natural vegetation and damaging resources.

In order to help restore the surroundings to a more natural and welcoming environment, Jenny Lake Boating management and employees developed a plan of action in coordination with Park staff. With no contract requirement to do so, Jenny Lake Boating set a goal to reduce its physical footprint by fifty percent!

Over the next four years, Jenny Lake Boating was able to achieve greater than a fifty percent footprint reduction. It accomplished its goal by implementing the following measures:

- Restored the area where two seasonal employee housing cabins had previously sat;
- Blocked off and revegetated an area where an aboveground fuel storage tank had been removed;
- Removed a trash dumpster to an off-site location;
- Redefined the outdoor employee dining area;
- Closed access to several social trails;
- Better defined and significantly reduced the size of the employee and Park ranger dirt parking lot area;



Dock at Jenny Lake Boating in Grand Teton National Park, Wyoming

- Purchased a 15-passenger van used to shuttle employees from the town of Jackson to Jenny Lake Boating;
- Encouraged carpooling or alternative transportation modes among employees; and
- Moved several large boat trailers off-site to free up much needed parking lot space.

Jenny Lake Boating has monitored the progress and results of its efforts and the actions taken have proven successful. Social trails, which numbered twelve when Jenny Lake Boating started operations in 2002, are now down to six. The outdoor employee dining area was redefined to be smaller, giving sixty percent square footage back to the natural environment. Additionally, the parking lots' square footage was reduced by thirty percent.

The change at Jenny Lake Boating has been, in some cases, quite drastic. Where large boat trailers previously were parked, elk and mule deer now graze. Wildflowers and grasses have reemerged in previously foot trampled areas, and songbirds nest in trees and bushes bordering closed social trails. Jenny Lake Boating has truly embraced the NPS mission of protecting, conserving and preserving park resources for future generations.





Did you know that according to the U.S. Environmental Protection Agency, 4.5 pounds of solid waste are generated by each individual in the U.S. every day? Solid waste disposal (SWD) facilities are reaching capacity quickly, and the siting and permitting process for building a new SWD site is long and tedious.

What Are My Requirements?

Faced with this solid waste dilemma, Federal, state, and local governments continue to revisit and refine requirements for solid waste management and disposal. However, there remain some principal management considerations, including:

- Keeping solid waste containers closed, maintained, and emptied on a regular basis;
- Storing large pieces of solid waste, such as old equipment, in a way so as to not collect water, attract disease vectors such as mosquitoes and rodents, and attract wildlife; and
- Transporting solid waste in a manner that minimizes fly-away pieces of trash (e.g., using a tarp to cover solid waste when transporting it in a truck).

ISWAP What?

Since the mid-1990's, the NPS has been using a solid waste management strategy called an Integrated Solid Waste Alternatives Program (ISWAP). An ISWAP is a systematic approach to managing solid waste. The goal of an ISWAP is to better understand how, why, and what types of solid waste are generated from your facility so you can identify strategies and goals for reducing solid waste sent to a landfill or incinerator.

Developing an ISWAP is a great best management practice for concessioners who may be interested in minimizing solid waste generated and disposed.

ISWAP Step 1: What's in My Solid Waste Stream?

The first step of an ISWAP is to get quantifiable data of how much and what type of waste is being generated from your facility. This step is sometimes referred to

as “dumpster diving” as it – in theory – involves tallying the contents of solid waste containers to determine the quantity and composition of solid waste such as paper, food waste, plastic, etc.

Take proper safety precautions when conducting this step. Sorting trash can be a messy and potentially dangerous process and may require the use of proper personal protective equipment. Alternatively, waste composition may be estimated using one or more of the following methods:

- View waste in a waste container and estimate the quantity and composition;
- Search the internet for waste statistics for your specific service industry; or
- Ask your trash contractor for any data it may collect on your waste.

Gathering quantifiable data on waste stream(s) is very important because with this information, you will be able to monitor progress of reducing your solid waste generation.

ISWAP Step 2: How Do I Reduce My Solid Waste?

Once you have an understanding of your solid waste stream and what it is and where it comes from, you are equipped to identify opportunities and strategies to reduce solid waste. Opportunities fall under the categories of source reduction, reuse, recycling, and composting. Utilizing one or a combination of these methods can help minimize waste sent to a landfill.

Examples of source reduction include purchasing items that come with less packaging, or purchasing items from manufacturers that will take back shipping containers. Reuse of waste may include reusing packing peanuts from manufacturers to ship items to customers, or donating toner cartridges to make new toner cartridges. Recycling involves extracting materials from a waste and reusing the materials in a new process. Examples of recycling include donating used fryer grease to a company that will

make biodiesel fuel or recycling used tires to make playground asphalt. Finally, composting involves the breakdown of organic materials such as food waste, yard trim, and manure into usable mulch or fertilizer. Composting options abound nowadays and range from simple “static pile” strategies (e.g., a pile of leaves in a backyard), to more automated, in-vessel compost technologies (e.g., an enclosed container allowing for easy mixing), to large-scale compost operations (e.g., long rows of compost and special machinery to mix each row).

What Else Do I Look For?

Your state or local jurisdiction, park, or concession contract may have additional solid waste management and disposal requirements. Additionally, some parks have developed their own ISWAP documents that can also serve as a great starting point.

Estimating Waste Composition

If you had an eight cubic yard dumpster that was 60 percent full and you observed that half of that was cardboard and one quarter of it was other paper products, how much solid waste would you have? You'd have:

- 4.8 cubic yards of solid waste (i.e., 8×0.60)
- 2.4 cubic yards of cardboard (i.e., 4.8×0.50)
- 1.2 cubic yards of other paper products (i.e., 4.8×0.25)
- 1.2 cubic yards of miscellaneous solid waste (i.e., $4.8 - 1.2$).

In this situation, it'd be preferable to figure out what that “miscellaneous solid waste” really was and where it came from.



RESOURCES:

For more information on how to conduct an ISWAP, refer to the 1996 NPS Solid Waste Management Handbook (Handbook) available from the Concession Environmental Management Program.

Note: The Handbook is currently being updated by the NPS.



Green Your Remodel

Every day there are news stories about “green” buildings, but it oftentimes is in the context of new buildings. What about greening existing buildings? Are there ways to integrate sustainable design principles into remodeling and renovation of older buildings?

The answer is yes. Constructing a green building doesn't have to mean starting from scratch or breaking the bank; in fact, business owners around the country are finding economical ways to incorporate sustainable ideas into their remodeling and renovation projects. Here are some easy ways you can integrate sustainability into your next remodel:

1. Start from the beginning. Incorporate sustainable building principles and ideas into the planning phase – starting with design concepts. Consider asking yourself, your architect, and your contractor the following questions:

- How big should our remodel be? Larger spaces use more resources to heat, cool, light, paint, carpet, etc.
- What materials are available locally? Buying locally may help keep costs down, support the local economy, and reduce the environmental impact from transportation.
- Are there ways to increase natural light into the building? If so, this will reduce the need for artificial light sources and reduce energy consumption.
- Can we coordinate the project to minimize disruption to the natural environment? If so, you'll spend less money on new landscaping materials once the project is finished. You'll also reduce soil erosion and stormwater runoff.
- How can we use natural features to reduce our heating and cooling requirements? Natural shelters such as trees, shrubs, and surrounding geography can help protect a building from wind to keep it warmer and provide protection from sun, keeping the building cooler. If deciduous trees are planted near a building, sunlight can stream into the building during the wintertime to help heat the building.

2. Reuse. Reuse materials from your original building, if possible. For example, if you're remodeling a kitchen, think about keeping the original stove or refrigerator if they are already energy-efficient. By doing this, you'll be saving resources as well as money.

3. Donate and recycle. If you can't reuse items that are still in good condition, donate them to another organization or have them recycled when feasible. A local charity might use your old cabinets for storage and you might be able to recycle your worn-out carpet. This means helping others as well as yourself through decreased disposal fees.

4. Don't forget energy and water conservation! When buying new fixtures and appliances, keep water and energy conservation in mind. For example, install low-flow showerheads and toilets. Seek out ENERGY STAR® qualified appliances including microwaves, refrigerators, air conditioners, televisions, and many more. These purchases save water and electricity and some states even offer rebates for installing conservation-friendly appliances.

5. Xeriscape! Incorporate native plants into your landscaping. Native plants require less water and fewer fertilizers and pesticides and may be less expensive than exotic plants, saving you time and money. Park staff can assist in identifying what plants are native and would be appropriate for the specific site.

With some planning, you can make changes to your remodeling and renovation projects that help save resources, commit to sustainable principles, and may even result in overall life-cycle savings.

*Xeriscape comes from the Greek word for “dry” (xero) and the word landscape. This type of landscaping involves incorporating plants that are native to the area and which do not require a lot of water to keep alive.



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CoEMP Corner: Sustainable Developments for Our Future

Environmentally-related events of 2006 further emphasized the topic of sustainability. We've seen wild fluctuations in gasoline prices at the pump, and severe weather has found its way to all parts of the country. As these events have unfolded, I can't help but to think that sustainability is more important now than ever before for us and our children.

The Concession Environmental Management Program (CoEMP) has dedicated this issue of the *GreenLine* Newsletter to topics related to sustainability. In Dr. Ima Park, we offer suggestions on how to communicate the message of sustainability to park visitors. In Concessioner Highlights, we highlight a Grand Teton National Park concessioner who is taking it upon itself to reduce its environmental footprint. In The NPS is LEEDing the Way in Sustainable Building Design, we describe steps that the NPS is taking to ensure that new building construction and renovation apply sustainable design principles and concepts.

As always the CoEMP aims to provide concessioners with appropriate and applicable environmental management information, and this issue is no exception. There are articles highlighting new regulatory developments for mercury-containing equipment and cathode ray tubes found in computers and televisions.

To quote Theodore Roosevelt, "The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired in value." The questions we ask, the choices we make and the commitment we have to influence others can result in a greater understanding and commitment to protecting our national parks.

Wendy M. Berhman
Team Lead
Concession Environmental Management Program

GreenLine

ASSISTANCE

If you require technical assistance on environmental issues or want to learn more about the Concession Environmental Management Program (CoEMP), contact us:

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click "CoEMP"



Pass on those Pesky Packing Peanuts

Ever wonder what to do with all those nonbiodegradable loose polystyrene packing peanuts that accumulate from shipments you receive? The Plastic Loose Fill Council has set up a nationwide program where individuals may drop off bags of loose packing peanuts at local participating stores. The stores will then reuse the peanuts for packaging purposes.

To find a local store that participates in the Peanut Hotline program, you can visit www.loosefillpackaging.com and enter

your state, city, and zip code. You may also call the Peanut Hotline at 1-800-828-2214 to locate the nearest participating store.

An even better option is to contact your vendors and request that they package their products with more environmentally preferable packaging, such as biodegradable packing peanuts. Remember, not everyone who receives packing peanuts will take advantage of the Peanut Hotline, so encouraging the elimination of nonrecyclable peanuts from your vendors will help reduce waste in the long-run.

