



Waste Reduction Tips For Hotels and Casinos In Indian Country

Tribally owned hotels, motels, resorts, casinos, and bingo halls have numerous opportunities to prevent waste when purchasing supplies and food, serving customers, or cleaning guest rooms.

There are approximately 400 hotels, motels, and resorts, and 200 casinos and bingo halls located in Indian Country. These facilities generate a tremendous amount of solid waste, including food waste, glass containers, metal cans, plastics, paper and cardboard. Hotel and casino operators have found that waste prevention reduces purchasing costs and disposal fees. So, waste prevention not only can help protect the environment and conserve natural resources, it makes economic sense.

Starting a Waste Reduction Program

Step 1 - Secure support. A successful waste reduction program requires both a philosophical and financial commitment from facility managers. Without this commitment, employees may be reluctant to fully embrace the program. Designate a “green team” comprised of representatives from each facility operation (e.g., housekeeping, kitchen, grounds keeping, purchasing) to provide support and input for the waste reduction activities.

Step 2 - Conduct a waste characterization study (waste assessment or audit). This study will help determine waste stream composition by identifying waste volumes, existing waste management practices (e.g., reuse, recycling, disposal), and the associated costs. It will help identify which portions of the waste stream could be recycled, reduced, or eliminated altogether. A waste audit also will help to identify disposal costs. Using a full cost analysis approach, taking into account complete lifecycle costs such as procurement, use, and final disposal, can further clarify the true costs of different materials and practices.



Turning Solids into Soil

Eastern Band of Cherokee Indians of North Carolina



The Cherokee Indian Reservation, located in western North Carolina, attracts 5 to 8 million tourists annually. After opening its casino in November 1997, the Eastern Band of Cherokee Indians (EBCI) initiated a pilot project, assisted by \$69,500 in EPA grant funding, to evaluate windrow and particle screening processes for composting food waste from their new casino and its three restaurants. EBCI already had an established composting program for wastewater treatment sludge (biosolids) and vegetative waste, and used their experience to develop a progressive system to compost food waste. EBCI collects approximately 1,200 pounds of food waste a day from the casino and its restaurants for composting. The Tribe distributes the final product to landscapers, nurseries, and individual homes both on and off reservation.

EBCI shares information about their program through newsletters and newspaper articles. For more information, contact John D. Long, sanitation manager, at 828 497-6977.



Once is Not Enough at Mohegan Sun Casino

Mohegan Indian Tribe of Connecticut

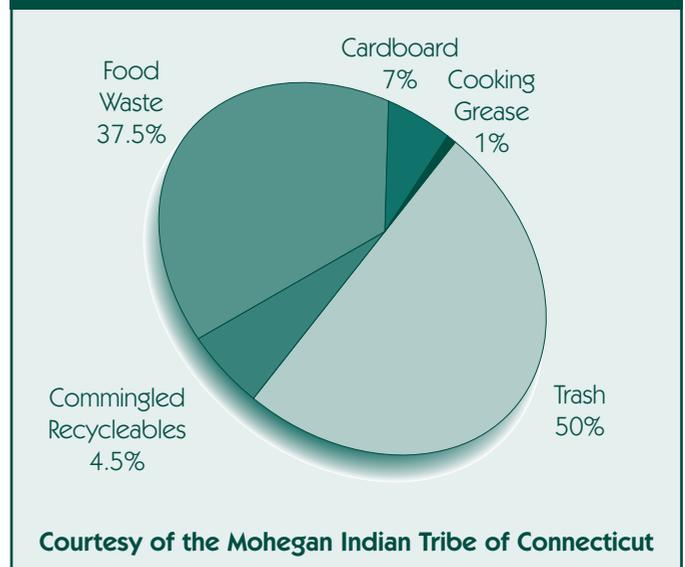


The Mohegan Tribe of Indians have experienced tremendous success with their waste management efforts. The Tribe's Integrated Pollution Prevention (P2) Program resulted in recycling more than 44 percent of the solid waste stream of the Mohegan Sun Casino and Tribal Office in 1997; that's twice

the average recycling rate for towns and cities in Connecticut!

Before the casino was built, the Mohegan P2 Team transformed waste disposal costs into revenue through the sale of recyclable materials such as corrugated cardboard, paper, plastic, cans, and glass. Even more waste was prevented by reusing clothing, toys, books, and other household materials. The casino itself was constructed through adaptive reuse of existing, older buildings. Since the casino's opening, the Tribe has pursued additional environmental initiatives. Automotive emissions from reservation visitors, for example, are voluntarily offset by the Tribe's purchase of emission offset credits from other facilities.

1997 Waste Stream Assessment



Food waste was a major problem for the Tribe, constituting 37.5 percent of the waste stream before waste reduction efforts. The Mohegans now send more than 2,190 tons of food waste produced each year in the casino's restaurant operations to an off-reservation piggery for use as feed, avoiding \$184,000 in hauling and landfill disposal fees. Pig waste and bedding from the piggery are composted

and reimported onto the reservation for landscaping use, thus “closing the loop” on food wastes. The pig-gery does not need to grow grain to feed the pigs and the Tribe does not need to purchase peat moss for mulch. The Tribe also sells waste fat, bones, and grease to a renderer for use in the production of animal feed and other products. For example, the sale of approximately 52 tons of cooking grease earns \$3,000 annually and avoids \$84 a ton in disposal fees, saving another \$4,368 a year.

Pollution prevention education of employees and contractors is a key aspect of the Mohegan program. More than 6,000 individuals involved in waste management have been through a P2 training program. The Mohegans also practice environmentally preferable purchasing, buying recycled-content products whenever possible. For more information, contact Dr. Norman Richards at 860 204-6112.



Waste Isn't Worth the Gamble at Foxwoods

Mashantucket Pequot Tribe of Connecticut



Eight years ago, Foxwoods was nothing more than a bingo hall housed in a two-story building in the Connecticut woods. Today, Foxwoods Resort and Casino is bigger than most small towns, employing 11,500 people and hosting more than 55,000 visitors during peak season. According to Mike Van Splinter, Foxwoods' director of environmental services, the Mashantucket Pequot Tribe was able to incorporate environmental designs from the start—rather than having to retrofit an established resort complex—because the Tribe was building in an undeveloped, rural environment. The Tribe made environmental

protection a priority well before Foxwoods reached its current size and popularity.

According to Van Splinter, Foxwoods recycles everything that is practical, including glass, steel, aluminum, plastic, and paper. To find the most profitable outlets for common materials such as corrugated cardboard, Foxwoods issues Requests for Proposals (RFPs) to secure vendors. To ensure maximum return on recyclables, Foxwoods purchased a baler to pack the corrugated cardboard and a combination can rinser/crusher to process steel cans. The facility uses more than 260 tons of steel cans in one year, but it recycles about 99 percent of them. The baler and rinser/crusher minimize the volume of Foxwoods' recyclables, increasing both dollar return and the number of vendors willing to accept the materials. To further facilitate its recycling efforts, the Tribe is creating two “mini-MRFs,” or materials recovery facilities, which, in addition to processing Foxwoods' materials, also will accept materials from surrounding areas.

The Tribe also has employed a number of waste prevention measures. It has, for example, arranged for used wooden pallets to be picked up by their vendor and house wine to be delivered in bulk recyclable barrels rather than individual bottles. In addition, the Tribe composts its yard trimmings on site and is looking into new technology that can convert its food residuals into energy. To reduce the weight of its waste, the Tribe has invested in dewatering equipment, commonly used by the pulp and paper industry, to extract water from its waste stream (water often comprises more than 30 percent by weight of the waste stream).

Van Splinter cites two important aspects of Foxwoods' waste management practices: separation of recyclables at the point of generation and a strong commitment from the Tribe and the Foxwoods staff. If you have questions about Foxwoods' waste management practices, contact Mike Van Splinter at 860 312-3060.

Starting a Waste Reduction Program

(continued from page 1)

Step 3 - Develop a waste reduction plan. Based on the waste assessment findings, set waste reduction priorities and goals for the facility. Goals should identify the extent to which each waste stream is to be reduced, reused, or recycled (e.g., recycle 20 percent of corrugated packaging).

Step 4 - Implement the program. Once waste reduction goals have been set, educate employees on

the waste reduction activities that will become a part of their jobs or responsibilities. Continually monitor, evaluate, and fine-tune waste reduction efforts by identifying more effective and efficient methods of reducing waste, increasing reuse and recycling, and identifying additional opportunities to remove or eliminate materials from the waste stream.

Three R's Checklist:

Reduce, Reuse, Recycle

- ◆ Buy in bulk to avoid excess packaging.
- ◆ Provide recycling containers in guest rooms and common areas to promote recycling.
- ◆ Recycle used bingo cards or purchase reusable ones.
- ◆ Compost food, paper, and grass clippings and other yard wastes, and chip larger branches for use as mulch.
- ◆ Implement an integrated pest management system to reduce the use of pesticides.
- ◆ Replace disposable items with reusable ones (e.g., ceramic mugs versus Styrofoam cups).
- ◆ Replace paper hand towels in rest rooms with hand dryers or cloth towel machines.
- ◆ Buy recycled-content products (e.g., paper towels, office paper, printer toner cartridges).
- ◆ Use plastic lumber made from recycled plastic for benches, tables, fencing, signs and car stops.
- ◆ Talk to a local pallet vendor about reusing, reconditioning, or recycling pallets.



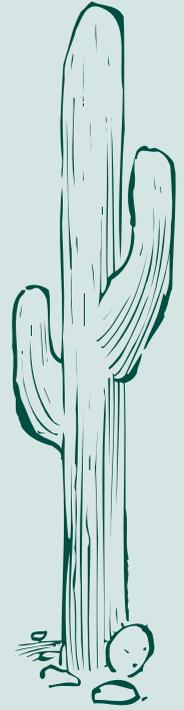
HELP CONSERVE RESOURCES!

Linens washed daily in hotels and motels around the world use millions of gallons of water. If you are staying with us for more than one night and feel it is unnecessary to change your bed linens every day, please leave this card on your pillow. Your bed will be made up and you will be helping to conserve water.

Thank you.

Tips for Reducing Waste

- ◆ Sell used decks of cards in casino gift shops as souvenirs (after drilling or cutting corners to prevent unauthorized reintroduction to game tables) or leave them in hotel rooms for your guests' use. The Prairie Island Indian Community in Minnesota donates their used cards to retirement homes, churches, scout troops, and other charitable organizations.
- ◆ Reuse—or donate for reuse—shipping, food, and other types of containers. The Lac du Flambeau Band of Lake Superior Chippewa Indians reuses its casino's small plastic coin containers in art projects at a local museum and cultural center, and five-gallon plastic containers find new uses at the fish hatchery and other tribal enterprises.
- ◆ Compost food, paper, and landscape trimmings on site and use the resulting nutrient-rich humus as a soil amendment or mulch.
- ◆ Purchase cleaning products in bulk or in concentrated forms. Educate staff on the proper mixing of concentrates to avoid waste and save money. The Lac du Flambeau Band of Lake Superior Chippewa Indians refills individual cleaning product bottles on housekeeping carts from a centrally located supply dispenser station. The cleaners are nonphosphated products bought in bulk, and reduce nutrient loadings to the environment.
- ◆ Install refillable shampoo and soap dispensers in bathrooms rather than using disposable plastic bottles or individual bars of soap.
- ◆ Offer guests the option of reusing their linens and towels. The Bois Forte Band of Chippewa provides guests staying more than one night with the option to reuse bed linens and bath towels, which helps reduce water usage.
- ◆ Landscape with indigenous plants adapted to the local climate and soil conditions. In dry climates, water requirements are reduced when use of water dependent plants such as lawn grasses is minimized. In other climates, mulching helps plants retain moisture as well as nutrients. Planting indigenous species rather than nonnative ornamental ones also reduces the need for chemical pesticides and fertilizers because the plants are adapted to the area.
- ◆ Become a WasteWise partner. Partners commit to reduce waste, establish waste reduction goals, and track their progress. Many tribes have already become partners quickly and easily by signing up online at www.epa.gov/wastewise or calling 800 EPA WISE (372-9473).
- ◆ Use Environmental Protection Agency guidelines for purchasing goods for your business. EPA programs such as the Comprehensive Procurement Guidelines Program www.epa.gov/cpg and Environmentally Preferable Purchasing program www.epa.gov/opptintr/epp outline criteria for purchasing products with high recycled content and a reduced effect on the environment.
- ◆ Buy long-lasting, energy-efficient fluorescent light bulbs, energy-efficient computers and appliances, and water-efficient fixtures. Consider joining EPA's Greenlights, Energy Star www.epa.gov/energystar, and Water Alliances for Voluntary Efficiency www.epa.gov/owm/genwave.htm programs. These voluntary partnership programs offer technical assistance, publications, software, and other tools to help make your facilities more energy and water efficient.



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Environmental Protection Agency
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Resources

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