



Focus on 2006 Governor's Award

from Ecology's Hazardous Waste and Toxics Reduction Program

2006 Governor's Award for Pollution Prevention and Sustainable Practices

Winners lead the way

Governor Christine Gregoire has honored five Washington businesses and a not-for-profit association with the 2006 Governor's Award for Pollution Prevention and Sustainable Practices, the state's highest environmental award.

The winners-- two electronics firms, a snack food manufacturer, a hotel and conference center, a dental office, and a group teaching organic gardening -- have shown they can offer their services and products, maintain their economic vitality, and protect the environment. They join 93 past winners who reduced or eliminated the use of toxic materials, minimized waste, and conserved energy, water and other resources. They reduced material and disposal costs, increased product quality, and improved worker health and safety.

Why they won

The winners demonstrated excellence and leadership through their commitment to environmental quality and their willingness to share their knowledge of pollution prevention and sustainable practices. Sustainable practices allow a facility to meet its needs, without jeopardizing the ability of future generations to meet their own needs.

The judging process

An external panel of judges selected the winners from finalists reviewed by Ecology staff. The judges are past winners, pollution-prevention experts, and representatives from business, labor and environmental groups, and academia.

2006 Governor's Award recipients

Dentistry Northwest is a small dental office housed in a classic Victorian home in Port Hadlock. Dr. John Barrett started the practice in 1979. The practice eliminated or reduced the use of heavy metals and toxic chemicals by finding alternatives, upgrading equipment, and redesigning their business practices.

They use a resin-based compound for fillings to avoid using the more common amalgam of mercury and other heavy metals. Chairside traps and amalgam separators in the drains keep materials from old fillings out of the wastewater. The digital x-ray machine doesn't need fixer and developer chemicals, eliminating the silver and lead-laden waste. It also decreased radiation exposure to staff. A sterilizing autoclave uses distilled water, rather than formaldehyde.

By upgrading their vacuum pump system and changing to digital x-rays, the practice dropped their water use by approximately 5,000 gallons per month. Their electronic records system eliminated the need for paper copies of patient charts. These are just some of the efforts this progressive office uses to take themselves from “the level of environmental regulation to that of ecological responsibility.”

Frito-Lay, Inc., Vancouver, produces and distributes “salty snacks” throughout the Pacific Northwest. The company committed itself to good environmental practices in the early 1990s, with an active Green Team drawn from all levels of the facility and a closely audited environmental management system. All employees receive environmental training to raise awareness of these important issues.

All wastes and by-products are tracked quarterly. This approach yielded both environmental and economic benefits. They reduced the amount of waste going to the landfill by 172 tons per year, and reduced disposal costs by \$17,000. Water use is down by 50,000,000 gallons and costs have been reduced by \$50,000 per year. Electrical and natural gas use are both down, and recycling is up.

At one time the facility was regulated by the state as a “large quantity generator” of dangerous wastes. By switching to water-based paints, changing lab procedures, and more carefully identifying their wastes, the facility dropped to the lowest level of regulation as a “small quantity generator.” This saves on associated fees and staff time, and reduces their paperwork.

Korry Electronics, in Seattle, designs and manufactures elements for military and commercial aircraft, military ships and track vehicles. The company has improved its environmental and economic performance with new equipment, redesigned processes, and a strong commitment to environmental protection.

Korry practices lean manufacturing, scrutinizing all phases of its operations to find and eliminate waste. Employees and suppliers worked together on a vendor-managed inventory program for chemical products, which reduced the amount of out of date material wasted. Employees verify that Korry Electronics products do not contain brominated flame-retardants, a class of persistent, bioaccumulative toxins.

The amount of paint booth filter waste dropped by more than half after new monitoring gauges were installed and the change-out process reworked. A new closed circuit cooling tower reduced water bills by an average of \$3300 per month and could reduce water consumption by 2.9 million gallons per year. It will also lower annual electrical costs by \$6,800 and use by more than 105,000 kWh.

"We have observed a culture change in which employees take ownership in finding ways not to generate waste and in ensuring the wastes that are generated are properly managed."

Panasonic Shikoku Electronics Corporation of America - Consumer Electronics, in Vancouver, manufactures combination televisions and projection televisions. Since 2005, the company has been making these products without using lead, hexavalent chromium, or other

toxins. All parts and supplies coming into the facility must meet rigorous chemical standards and can only contain materials on an approved chemical list.

This Panasonic company policy means the Vancouver facility will no longer use two pounds of lead solder, 42,000 pounds of hexavalent chromium, and 775,440 pounds of problem flame retardants each year. Besides reducing these sources of heavy metals and persistent, bioaccumulative toxins, employees at the plant pursue reducing consumption of all resources. New waterless fixtures save 280,000 gallons of water each year. Electrical use was down in 2005 by 1,188,108 kWh, liquefied petroleum gas (LPG) use was down by 7,571 gallons.

Employees worked with a plastics recycling company to start a market for their waste plastic. This same recycler is the source for 60,000 pounds of recyclable resin each year, completing the recycling "circle." The facility has an overall recycling rate of 94 percent and provided almost 2,000 tons of recyclables in 2005. Wood is the only waste not showing an increase in recycling due to a shift to durable shipping devices.

The **Seattle Tilth Association** has been teaching people about organic gardening and building the region's capacity for sustainability for 28 years. Members provide more than 300 programs that give people the tools to improve the environment, beginning with their own backyards. They serve more than 15,000 King County residents each year through classes and special events, such as the Edible Plant Sale and Organic Harvest Fair. They created their three demonstration gardens from barren concrete expanses.

Seattle Tilth minimizes water use at the gardens by conservation, soaker hoses, drip irrigation, mulches, and row covers. The greenhouse is solar powered. Instructors cut down on gas use by driving to local class sites rather than having students from throughout the region drive to the headquarters.

The Association works with other groups to promote donating fresh fruit and vegetables to food banks. Food from the demonstration gardens also goes to food banks and they work with Fremont Public Association to register fruit trees in the area for volunteers to harvest. "Our programs are designed to help people get to know each other and work together towards positive environmental change."

Sleeping Lady Mountain Retreat, near Leavenworth, accommodates up to 165 guests for meals and lodging and offers 10,000 square feet of meeting space. Sleeping Lady won the Governor's Award in 2001, for the environmental stewardship shown in its design, construction, and operation. The judges gave it the Continuing Excellence award for maintaining, and extending, those high standards for the past five years.

In that time, Sleeping Lady reduced electricity use through replacing path lights with LEDs and installing ground source heat pumps to heat water for the laundry and to heat and cool most of the guest rooms. The new music center buildings were designed and built according to the energy and materials conservation standards of the initial building. By installing decking made from recycled plastic and wood chips, Sleeping Lady avoids using the stains needed by wood decks.

The pool's new sanitation system employs an electrolytic process to cycle salt into chlorine and back, reusing the same material. The facility's management worked with a group to bring recycling to the entire community of Leavenworth. The food service composts organic waste. Glass bottles are ground and used for drainage medium, paths, and winter ice control. Sleeping Lady uses recycled building materials whenever possible, such as the table tops and bar counter made from plate glass.

"Sleeping Lady demonstrates the benefits of ecologically sensitive methods of construction and operation to our guests and the world each day."

For more information

Contact Mariann Cook Andrews of the Department of Ecology's hazardous-waste program, 360-407-6740, or visit the Governor's Award Web site at:
www.ecy.wa.gov/sustainability/govaward/gov_awards.htm

If you need this information in an alternate format, please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.