

Portland VA Medical Center A continuous improvement success story

This fact sheet demonstrates how a medical center can take incremental steps that get big results in saving money, reducing waste and improving regulatory compliance. Over the past recent years, the DEQ Hazardous Waste Technical Assistance Program has provided ongoing assistance to the facility to help reduce its hazardous waste.

Background

The Portland VA Medical Center is a treatment, teaching, and research medical facility located in downtown Portland, Oregon, with another facility located approximately eleven miles north in Vancouver, Washington.

The facility operates eight outpatient clinics and serves as a world-recognized research center with over 90 principal investigators working in approximately 75 research laboratories. The facility maintains a very active affiliation with Oregon Health & Science University and trains more than 1,260 university residents, interns, and students each year.



Portland VA Medical Center

The medical center's core mission is to "Honor America's veterans by providing exceptional health care that improves their health and well-being." To support and accomplish this mission, the facility is committed to minimizing pollution and protecting the environment.

Environmental successes

The facility continues to implement pollution prevention and waste minimization measures including: increasing the solid waste diversion rate to over 50 percent; reduction of bio-hazardous waste by 30 percent over a 3 year period; reduction of water consumption by 1.3 percent in 2010; reduction of toxic chemical

use; increase in the number of recycling programs; replacement of equipment including chillers, boilers, and upgrading our air handler units to all be more energy efficient. The medical center has an active alternative transportation program, to include 3 person carpool requirements, free employee bus passes, avid bike to work participation, and have more than 80 alternative E-85 vehicles as part of its government fleet.



Pharmacy waste streams are segregated for recovery and disposal

DEQ identified opportunities to reduce hazardous waste in research laboratories, to reuse hazardous materials generated in the clinical laboratories, and to recycle waste that was going directly to the landfill. In response to identified compliance hazardous waste concerns the medical center corrected them and went on to implement a Green Environmental Management System and committed to continuously improve its environmental performance.

Reduce

In 2011, reduction strategies include:

- Installed an amalgam separator system in the dental service. The project was completed in early 2010. This will help eliminate mercury waste in the amalgam from entering the sewer system.
- Established a system for amalgam recycling in the Dental Service.
- Initiated a program to neutralize formalin waste instead of disposing of as hazardous waste.
- Converted chillers from R-11 refrigerant to more environmentally friendly R-134a refrigerant.



State of Oregon
Department of
Environmental
Quality

Environmental Partnerships Hazardous Waste Program

2020 SW 4th Avenue
Portland, OR 97201
Phone: (503) 229-5963
(800) 452-4011
Fax: (503) 229-5850

Contact: David Kunz
www.oregon.gov/DEQ/

- Cleaned out and converted pesticides to use of non-organophosphates chemicals with nothing above warning level – irritant.
- Analyzed pharmacy waste streams and appropriate segregation and disposal were established.
- Recycled 1,015 pounds of silver from cardiac cath x-ray film.
- Replaced sulfuric acid drain cleaners with bio-based enzyme products.
- Continued battery and xylene recycling will with established goals.
- A 25 percent reduction in flammable hazardous waste in 2010.
- A 36 percent reduction in corrosive hazardous waste in 2010.
- A 12 percent reduction in oxidizing hazardous waste in 2010.

Reuse

For 2010, the medical center donated 7317 pounds of personal computers, 19,600 pounds of monitors, 280 pounds of printers, and 12 pounds of miscellaneous electronics to local schools or community partners. During earth week, the facility collected cell phones for soldiers, running shoes for Nike re-use a shoe, and electronics for re-use/recycling in the community.

Recycle

The facility continues to recycle many items, such as plastic, glass, cans, scrap metal, construction debris, tires, cooking and industrial oils, precious metals, toner cartridges, batteries, Styrofoam, and blue wraps. Our largest recycling efforts this past year were from paper at 421 tons, 145 tons of cardboard, 156 tons of yard debris and 207.5 tons of comingled recycling at our Vancouver campus

Economic Benefits

- \$65,457 savings by replacing chillers to more energy efficient models
- \$130,952 savings by upgrading to more energy efficient air handling units
- \$8,000 annual cost reduction for water conservation measures implemented.
- \$6,621 savings for reduction of bio-hazardous waste
- \$52,000 savings due to increased recycling programs and achievement of 50 percent solid waste diversion rate

Rewards

The medical center has received many awards, including the VA National Environmental Sustainability Award in 2010, the Practice Green

Health Environmental Excellence Award with Distinction in 2010, and recognized by the City of Portland for Eco-friendly landscaping practices and recycling partners.

In the community, the medical center partners with the Friends of Terwilliger, Boy Scouts of America, Metro, Practice Green Health, and Oregon Health Sciences University and other hospital partners. The medical center hosted ivy removal, campus clean ups, sustainability fairs and workshops. The center considers itself to be a leader in the environmental world and thrives on sharing with others the responsibility of environmental management.



Medical center employee environmental information events

For more information

For more information on Portland VA Medical Center's environmental programs, please contact, Green Environmental Management System Coordinator Wendy Trapp, at 503-220-8262, ext. 55417.

For more information on how to dispose of your hazardous waste properly, please visit the DEQ Hazardous Waste Technical Assistance Website or call 503-229-5913.

Alternative Formats

Alternative formats of this document can be made available. Contact DEQ's Office of Communications & Outreach for more information at (503) 229-5696.