Fact Sheet

Portland VA Medical Center

A Pollution Prevention Success Story

This fact sheet demonstrates how a medical center can take small steps that get big results in saving money, reducing waste, and improving regulatory compliance.

The Department of Environmental Quality (DEQ) rated the Portland VA Medical Center (PVAMC) “exceptional” during a 2008 technical assistance visit. In 2007 the Environmental Protection Agency (EPA) in 2007 selected this facility as the first Veterans Administration medical center in the nation to become a member of the National Environmental Performance Track Program. This program recognizes top environmental performers and drives environmental excellence by encouraging facilities to go beyond regulator compliance. The DEQ Hazardous Waste Technical Assistance Program helped the facility to reduce its hazardous waste generation.

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 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 challenges

A 2005 inspection by EPA and DEQ revealed the following challenges:

- Three small containers in the used oil storage room did not have labels
- Approximately 40 boxes of waste fluorescent tubes were not labeled
- No hazardous waste label on the aerosol can-punching machine’s residue drum
- A review of the weekly hazardous waste inspection records revealed one week in March 2003 and two weeks in February through March of 2004 where inspections had not been documented

The PVAMC implemented a number of pollution prevention and waste minimization measures, including quickly abating the items noted during the inspection.

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 PVAMC corrected them and went on to implement a Green Environmental Management System and committed to continuously improve its environmental performance.

The facility operates four community based outpatient clinics and serves as a world-recognized research center with over 50 principal investigators working in approximately 65 research laboratories. The facility also maintains a very active affiliation with Oregon Health & Science University (OHSU) and trains more than 1,200 university residents, interns, and students each year.
Reduce
A major focus of the medical center was to reduce hazardous waste generation and disposal through waste characterization, reduction of inventory, switching to less hazardous materials, and recycling.

From 2005 to 2007 the PVAMC decreased hazardous waste generation and disposal by about 50 percent including the reduction of:
- Flammables: 15,074 to 9,633 lbs.
- Corrosives: 1,470 to 978 lbs.
- Toxics: 1,223 to 1123 lbs.

The PVAMC also installed a new booster system that used 32% less energy (1.72 KVA versus 5.42 KVA) to pump water to the top floors of the building. The original pump constantly ran at 15 horsepower (hp), while the new pump runs intermittently at about 2hp. In addition, the facility will conserve over 400,000 gallons of water in 2008 through the installation of waterless urinals and automatic faucets. The labs reduced the amount of chemical stock on hand, reducing the need to dispose of new, expired product.

Reuse
The PVAMC also actively searched for ways to reuse, especially during its annual Earth Week events. In 2008, the facility collected 150 pair of tennis shoes for recycling, recovered 40 cell phones for reuse, hosted an office supply swap where numerous employees brought office supplies for exchange with other areas, and held a shredding event where employees brought their personal files to be shredded and reused to produce other paper products. Most of the sinks and fixtures from construction occurring on the campuses were reused to limit the amount of waste going to the landfill.

Recycle
The facility recycled mercury-containing equipment, virtually eliminating this disposal stream. The facility also recycled materials like paper, glass, tires, cardboard, toner and ink jet cartridges, plastics, metals, and batteries, sending them to facilities that could process them into new materials and products. This reduced both the landfill disposal volumes and the expenses associated with disposal.

Economic benefits
In addition to reducing risks associated with managing hazardous materials, these pollution prevention measures also resulted in short and long-term cost savings:
- $6,400 saved in housekeeping chemical cost in 2007 from switching to less hazardous chemicals and decreasing eight chemical line items
- $2,237 saved in disposal and new product purchasing costs in 2007 by recycling used xylene
- $4,000 saved in hazardous waste disposal from reducing hazardous waste generated from 2005 to 2007

For more information
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.

For more information about PVAMC’s Pollution Prevention Program, please contact Frederick White at 503-220-8262, ext. 54765.

For information on EPA’s Performance Track Program contact Bill Glasser at 206-553-7215.

Alternative formats
(Braille, large type) of this document can be made available. Contact DEQ’s Office of Communications & Outreach, Portland, at (503) 229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696