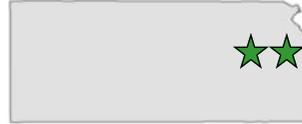


2010 Case Study

VA Eastern Healthcare System

Pollution Prevention Institute
Kansas State University

Topeka & Leavenworth, Kansas



Company background

The VA Eastern Kansas Health Care System (VAEKHCS) is comprised of the Colmery-O'Neil VA Medical Center in Topeka and the Dwight D. Eisenhower VA Medical Center in Leavenworth. VAEKHCS cares for approximately 36,000 veterans in 39 counties. The two centers provide the following services 24 hours a day, 365 days a year: emergency, inpatient, medical, surgical, respiratory, therapy, rehabilitation, and psychiatry. Some of their special programs include a domiciliary, geriatric evaluation and management unit, homeless veteran program, and post-traumatic stress disorder unit. Built in 1946, their mission is to provide accessible, courteous, comprehensive, and quality health care to veterans in an environment of excellence.

Project background

In recent years, federal facilities across the United States were issued an administrative order to assess and begin implementing environmental initiatives. Prior to the intern's arrival, VA Eastern Healthcare system had completed a comprehensive energy and waste audit. Computer power management and water conservation were two areas not detailed as part of the earlier audit and were subsequently selected for the 2010 intern summer project.

Incentives to change

VA Eastern Kansas Health Care System participated in the Pollution Prevention Institute Intern Program in the summer of 2009 when the H2E Circuit Rider Intern visited the Topeka and Leavenworth locations to do a brief preliminary conservation audit. The Circuit Rider made many recommendations that showed the possibility for substantial energy, water, and cost savings. As a result of the brief assessment work in 2009, the VAEKHCS decided to hire a full-time intern for the summer of 2010. Topeka and Leavenworth centers are both very large facilities that are showing signs of aging and heavy use, with several obvious opportunities for pollution prevention.

Projects reviewed for source reduction potential

The VAEKHCS 2010 intern focused on two primary areas—computer power management and water conservation. Implementation of these two projects could result in more than \$125,000 in cost savings, and conserve more than 1.5 million kWh and 3.6 million gallons of water per year.

1. Computer power management

The first project involves implementing a computer power management plan for both the Topeka and Leavenworth facilities. The intern collected data related to the number, type, and use patterns of the computers at each campus. Energy Star computer management software was used to analyze the data and calculate potential savings. The project aimed to reduce the amount of energy used when computers are not in use by recommending the network be re-programmed to put units in sleep mode automatically after a set period of time. Capitol costs related to implementation of a power management program are minimal, but the resulting energy and cost savings are significant.

2. Water conservation

The second project was an aerator replacement project. After conducting a hands-on survey of the flow rates of more than 75 sinks at the Topeka facility, substantial evidence was found to recommend upgrading the hand sink aerators to units rated at 0.5 gallons per minute. Many of the fixtures were outdated and some flow rates tested were as high as 4.0 gallons per minute. Installation of aerators is a simple project and comes at a low cost for the facility while still providing a large water savings for the hospital. The project was only completed at the Topeka facility, but it is expected the Leavenworth campus would yield similar water and cost savings.

Summary of 2010 H2E Intern recommendations for VA Eastern Healthcare System

Project	Annual cost savings	Environmental results	Status
Computer power mgmt	\$102,826	1,553,260 kWh	In process
Water conservation (Topeka)	\$23,660	3,656,890 Gallons	In process
Green house gases diverted in standard tons			
Total for all sectors	1,229 MTCO ₂ e		