

NHB Environmental Stewardship Stretches from Local to Global

Efforts Include Elimination of Mercury Used in Common Practices

THE RESULTS OF Naval Hospital Bremerton's (NHB) on-going conservation efforts and environmental stewardship are being felt over 9,000 miles away, as well as close to home. Efforts include the elimination of mercury in the hospital's common practices as well as tree plantings nearby and in far away places.

On behalf of NHB, 100 trees are being planted in Tanzania courtesy of Trees

Closer to home, the staff of NHB also engaged in tree planting, adding numerous deciduous trees as well as indigenous plants to the new Healing Garden. The project was one of many designed to involve staff members in the celebration of Earth Day 2011 during the week of 18-22 April. Other projects included a restoration of the NHB Nature Trail, as well as a thorough roadside cleanup outside the base's main gate.

conservation and doing a tremendous job," said Capt. Mark E. Brouker, NHB Commanding Officer. "The Making Medicine Mercury Free award, along with the other awards we have received, recognizes and celebrates the effort put in by everyone involved."

The Making Medicine Mercury Free Award was presented to NHB for showing significant effort to become virtually mercury-free, writes Anna

Our goal is to eliminate all mercury from NHB as new alternatives become available.

—Robert Mitchell

for the Future, an agroforestry resource center that works to improve livelihoods and restore degraded lands to sustainable productivity through planting beneficial trees. These trees will become part of a Tanzanian village project that is being implemented to help save the homes and way of life in the country. The fast-growing, permanent, beneficial trees will help to protect the fragile and eroded lands.

During that same week, NHB was presented with the Making Medicine Mercury Free award as part of Practice Greenhealth's 2011 Environmental Excellence Awards. Along with a national award for energy reduction earlier in the year, NHB has also received a local community award for pollution prevention.

"Our Facilities Management department is really at the cutting edge in

Gilmore-Hall, Practice Greenhealth Executive Director, in official correspondence to the command describing the award. "Your achievement serves as an example of what can be accomplished with determination, conviction and teamwork," she wrote.

This award recognizes facilities that have virtually eliminated mercury from their facilities and have demon-



Capt. Mark E. Brouker, NHB Commanding Officer, is presented the Making Medicine Mercury Free Award plaque from Robert Mitchell, NHB Environmental Manager, who accepted the award on behalf of the command at the Practice Greenhealth 2011 Environmental Excellence Awards ceremony.

MC1(SW) C. Obana

stated a commitment to continue to be mercury-free. Award criteria include mercury-free management and purchasing policies, as well as recycling programs. The award is issued by Practice Greenhealth—the nation’s leading membership and networking organization in the health-care community that have made a commitment to sustainable, eco-friendly practices.

NHB’s “Mercury Elimination Plan” starts with an inventory of supplies, materials and equipment containing mercury; their locations, manufacturer and quantity, and an assessment of the feasibility of replacing with mercury-free alternatives as practicable. The plan also includes requirements to ensure mercury-free products are purchased, as well as involvement with maintenance and

construction staff to ensure no mercury items are introduced during repairs or projects.

For example, NHB replaced its fluorescent lamps with green tipped, energy efficient, low mercury lamps. The hospital is now using digital radiology machines that eliminate any mercury products being needed for wet x-ray processing. Dental amalgams used in dental procedures are also captured and recycled.

“Our goal is to eliminate all mercury from NHB as new alternatives become available.” said Robert Mitchell, NHB Environmental Manager. “Fortunately, our industry and manufacturers have responded to this issue, and it’s becoming easier to find safer, cost-effective alternatives. But to further minimize

mercury’s effect, NHB has set standards that go beyond regulatory reductions. It hasn’t been an easy process, but we believe a healthier patient and staff environment is more than worth the effort.”

Other NHB’s achievements that were included in the Practice Greenhealth award submission include the following:

Energy Use Reduction

Between 2003 and 2009, NHB reduced energy consumption by a total of 21.8 percent equating to recurring annual savings of \$300K. For these efforts, NHB received the 2010 Energy Efficiency Committee (E2C) Award from the American Society for Healthcare Engineering recognizing over 15 percent energy use reduction. This reduction was achieved by replacing older equipment with energy efficient equipment, such as Heat, Ventilation and Air Conditioning units, installing automatic shut-off switches for lights, purchasing equipment with the Energy Star logo, and by turning off unused equipment. NHB is the first military treatment facility in any service to receive the E2C award.

“We have been tracking and attempting to decrease energy consumption for many years,” said Russell Kent, NHB Facilities Manager. “This award is very gratifying since it provides independent recognition of various efforts, which often are unrecognized. In addition to Facilities Department members, this award also recognizes the efforts of the entire NHB staff, since common sense initiatives such as turning off lights and unused equipment, or reporting wasteful conditions are an important element of our success.”

Green Purchasing

To increase NHB's efficiency in green procurement, the Purchasing Department staff and other clinical staff attended the Department of Defense Course on Affirmative Procurement (Eco Purchasing). Completion of the "Buying Green: A Multifunctional Approach to Pollution Prevention" class was one objective in achieving this goal. When non-clinical supplies are ordered, the purchasing staff checks for green alternatives prior to buying the requested material. As a result, NHB was successful in instituting the use of 100 percent recycled content paper by deleting all other options from the supply catalog.

Pollution Prevention & Solid Waste Reduction

Working with supply personnel, an evaluation identified that significant amounts of materials were stored in the departments and clinics that were not used and eventually discarded. Supply personnel streamlined the ordering process to reduce the amount of low-demand materials ordered and minimize the quantity of stocked materials. The Supply Department also partnered with a local vendor/distributor to implement a "just in time buying" strategy with the vendor guaranteeing to deliver commonly used supplies within 48 hours of submitting a purchase order. These initiatives resulted in the reduction of waste production from 250 tons to 201 tons between FY2006 and FY2009, a reduction of 19.6 percent, well exceeding the NHB reduction goal of three percent per year.

Recycling Program Expansion

Between FY2006 and FY2009, NHB increased the quantity of materials recycled from 26 tons to 151 tons, an increase of 580 percent, far exceeding the NHB goal of five percent per year. This increase was achieved through:

1. Expansion of the recycling collection area
2. Installation of an overhead awning to improve the collection capacity for recyclable materials
3. Better training and oversight of construction workers
4. Emphasis of the hospital's sustainability efforts during staff

orientation and bi-monthly leadership forums

Digital X-Ray

In October 2009, NHB converted 12 of 13 x-ray machines, including dental, to digital technology, dramatically reducing quantities of hazardous material and waste produced by film processing. The hospital's last remaining wet processor is used for asbestos surveillance, which by regulation requires the continued use of film x-rays.

Construction & Repair

Prior to construction and repair work, a preconstruction risk assess-



Capt. Mark E. Brouker, NHB Commanding Officer, is flanked by Capt. Mark Turner, NHB Executive Officer and NHB Command Master Chief Frank Dominguez, as they get ready to participate in the command's tree planting efforts on the new Healing Garden.

MC1(SW) C. Obana



Medical Service Corps officers at NHB take part in the command's active participation in Earth Day by helping to add numerous deciduous trees and indigenous plants to the new Healing Garden.

MC1(SW) C. Obana



Hospital Corpsman First Class Sara Dozier scoops up more discarded rubbish and passes it to HM1 Elizabeth Auckland as part of NHB's First Class Petty Officer Association highway cleanup along Highway 166 in Port Orchard.

Douglas Stutz

ment is performed by a multi-disciplinary group, which included environmental management staff. This assessment allows potential environmental issues to be identified early and a mitigation plan to be developed. Additionally, environmental staff participate in pre-construction planning meetings to identify all affected environmental media and ensure that mitigation plans are included in the construction plans, as well as periodic project status meetings to ensure mitigation plans are adequate and are adhered to.

Policy Implementation

Newly reported staff, military and civilians, attend mandatory orientation, which includes topics regarding NHB environmental policies, such as:

1. The proper segregation and disposal of wastes
2. Management of hazardous materials
3. Environmental Management System awareness and implementation
4. Pollution prevention goals, objectives and targets
5. Recycling program

Additionally, environmental staff participate in "Environment of Care" rounds, inspecting all spaces at least annually to verify compliance with all environmental programs and to identify trouble areas for additional attention and resolution. ⚓

CONTACT

Douglas Stutz
 Naval Hospital Bremerton
 360-475-4665
 DSN: 494-4665
 douglas.stutz@med.navy.mil