

Case Study: New Composting Program Boosts Waste Diversion

The U.S. Navy's Naval Station Great Lakes, near Waukegan, Illinois, increased its amount of materials recycled by an astounding 114 percent by initiating a campaign to add a composting component, reuse construction and demolition debris, and increase the number of collection bins available throughout the installation. The composting project alone amounted to more than 300 tons of food scrap and landscape waste diverted from area landfills.

NSGL took an aggressive and multi-faceted approach to raising its diversion rate. Active participation of employees and trainees to maximize collection and minimize contamination of recyclables by trash was critical. NSGL worked to carefully tailor its communication to a military audience, educating on the importance of recycling as it related to domestic and foreign policy. In addition, NSGL asked their recycling and composting vendors to track and report tonnage of material produced at each collection point. This encouraged a friendly competition for increasing recycling and food waste tonnage collected among areas of the facility. Along with collecting food waste for composting from the five galleys (cafeterias), NSGL switched to using biodegradable plates, cutlery and napkins to further reduce materials sent to a landfill.



Naval Station Great Lakes — “The Quarterdeck of the Navy.”

Sustainable Materials Management

Federal Green Challenge

Key Topics

- Food waste composting.
- Recycling.

Results

- 114 percent increase in materials recycled.
- Initiation of new food composting program.
- 300 tons of food scrap and landscape waste composted.

Facility at a Glance

- The Navy's largest training station, located on 1,600 acres in north suburban Chicago.
- A small city with galleys, gas stations, a harbor and public works department.
- 20,000 to 30,000 military and civilian personnel on the station at any time.
- Participant since 2011 in the FGC waste, transportation and water categories.
- Recipient of EPA Region 5 FGC Award: Waste.



CHANGING HOW WE THINK ABOUT OUR RESOURCES FOR A BETTER TOMORROW

Waste Diversion Boosted

Garnering the support of Navy's senior officers and managers was crucial to the success of the recycling and composting programs. The commanding officer is provided quarterly status reports with tonnages of material recycled at each collection point. With high-level support for the materials management program established early, the changes were more easily integrated through the chain of command.



NSGL sustainability team from left to right: Peter Behrens, Paul Stoick, Mark Schultz, Matthew Wollert, Sr., Matthew Wollert, Jr., Norm Lucas, Robert Walleck, Robert VanBendegom, Cora Mata, Mark Hoyer.

NSGL faced numerous challenges in the implementation of its new programs, the largest being financing the composting program. While the recycling program is self-funded through the sale of recyclable material, the market for composted materials is inconsistent and must be closely monitored. By working with its composting vendor, NSGL was able to reduce the cost of compost collection to the price of trucking materials from the site.

Why is Composting Waste Important?

Compost has the ability to help regenerate poor soils. The composting process encourages the production of beneficial micro-organisms (mainly bacteria and fungi) which in turn break down organic matter (food and landscape wastes) to create humus. Humus—a rich nutrient-filled material—increases the nutrient content in soils and helps soils retain moisture. Compost has also been shown to suppress plant diseases and pests, reduce or eliminate the need for chemical fertilizers, and promote higher yields of agricultural crops.

About the Federal Green Challenge

The Federal Green Challenge, part of EPA's Sustainable Materials Management Program, is designed to challenge federal agencies throughout the country to lead by example in reducing the federal government's environmental impact. It helps agencies meet obligations under Executive Orders 13514 and 13423.

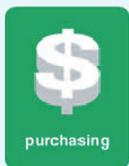
In 2012, nearly 300 federal agencies, representing more than 500,000 employees participated in the Federal Green Challenge. Their combined efforts resulted in an estimated cost savings of more than \$31 million to U.S. taxpayers.



waste



electronics



purchasing



energy



water



transportation

For More Information

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<http://epa.gov/fgc>