



2015 Secretary of Defense Environmental Awards Sustainability, Individual/Team Award

Since 1962, the Department of Defense (DoD) has honored individuals, teams, and installations for their outstanding achievements and innovative work protecting the environment while sustaining mission readiness. The 2015 Secretary of Defense Environmental Awards recognize accomplishments from October 1, 2012 to September 30, 2014. A diverse panel of judges with relevant expertise representing federal and state agencies, academia, and the private sector evaluated all nominees to select one winner for each of the nine categories that cover six subject areas: natural resources conservation; environmental quality; sustainability; environmental restoration; cultural resources management; and environmental excellence in weapon system acquisition.

About the Sustainability, Individual/Team Award

The Sustainability, Individual/Team award recognizes individuals and teams responsible for significant progress implementing sustainable practices on an installation. This award acknowledges efforts to prevent or eliminate pollution at the source, including practices that increase efficiency and sustainability in the use of raw materials, energy, water, or other resources. Sustainable practices ensure that DoD protects valuable resources that are critical to mission success. The 2015 winner of the Sustainability Individual/Team award is the *Minnesota Army National Guard Sustainability Team*.

About the Minnesota Army National Guard Sustainability Team

The Minnesota Army National Guard (MNARNG) has a presence in 63 communities throughout Minnesota. This includes the 53,000-acre Camp Ripley, the Arden Hills Army Training Site (AHATS), as well as numerous armories, Field Maintenance Shops, and Army Aviation Support Facilities. Camp Ripley is a regional training facility for the military, federal, state, local and civilian communities. The MNARNG Sustainability Team manages environmental stewardship for Camp Ripley, which has long served as a showcase for the compatibility of environmental innovation and excellence with military training. In addition, the field maintenance shop at AHATS received a Gold rating under the Leadership in Energy and Environmental Design (LEED) green building design standards.

The MNARNG recognizes that incorporating sustainability into its operations, acquisitions, and infrastructure will help reduce its resource demands, while preserving current and future operational flexibility. Emphasizing energy and water conservation, pollution prevention, waste stream elimination, compliance, and technological innovation, the Team's efforts over the past two years have laid the foundation for a new era in the MNARNG's operations and environmental leadership. In FY 2013, the Team went above and beyond, completing the State Sustainability Action



Energy Challenge: Beginning in April 2014, Training Area and Community Centers that have a consistent year of energy data and have not had improvements to the energy infrastructure in the past or current year started competing in an energy efficiency challenge. MNARNG distributed awareness materials across the state to encourage behavioral changes.

Plan and the Joint Sustainability Master Plan, which outline goals and strategies for achieving benchmark reductions in energy use, increasing recycling, promoting carpooling and transit programs, and eliminating waste streams. Sustainability goals are fully integrated into MNARNG operations; the Adjutant General's Campaign Plan emphasizes sustainability projects as core to the MNARNG's mission, particularly in areas related to energy conservation and use reduction, renewable energy production, green construction, and the Camp Ripley Army Compatible Use Buffer.

Major Accomplishments in FY 2013-2014

- Issued An Energy Challenge, funded through the Qualified Recycling Program, and launched throughout the State of Minnesota. The goal of this project is to reduce energy intensity at each facility by 3% from the previous year through engagement and influencing behavior change.
- Completed a site specific request for proposals for Camp Ripley, which covers an investment grade energy audit on nearly 1.1 million square feet of building space. The purpose of the audit is to further identify retrofitting and upgrade opportunities that will reduce the training site's energy use and \$1.5 million annual utility costs. The audit also requires an evaluation of the entire exterior lighting system within the cantonment and possible replacement with Light Emitting Diode (LED) fixtures and a dynamic lighting control system.
- Installed solar photovoltaic (PV) and solar thermal arrays at AHATS. This first large-scale 40kW solar photovoltaic and solar thermal array has been an important demonstration of solar energy's potential. The solar PV provides approximately 6.5% of the electrical needs for the 100,000 square foot maintenance facility.
- Conducted a feasibility study in 2013 for construction of a biomass heating district for seven primary buildings on Camp Ripley. The plant would use an entirely renewable energy source; the tremendous amounts of wood debris generated on post through forest management would offset 91% of the buildings' fossil fuel heating requirements.



Solar PV and Solar Thermal equipment at AHATS: This solar PV system was designed to provide 6.5% of the facilities electrical requirements.



Ground source heat pumps: The pumps were installed for the new Education Center addition currently being constructed at Camp Ripley. This technology has decreased energy consumption by 45% at other facilities.

For information on past winners, please go to: www.denix.osd.mil/awards.