



U.S. Army Environmental Command

Aberdeen Proving Ground, MD 21010-5401

FOR IMMEDIATE RELEASE

April 21, 2008

FOR MORE INFORMATION CONTACT:

Robert E. DiMichele, USAEC Public Affairs Officer
(410) 436-2556, Robert.DiMichele@us.army.mil

Fort Hood a LEEDer in environmental stewardship

Aberdeen Proving Ground, Md. Fort Hood is improving the quality of life of Soldiers and families living on the installation through environmental planning.

As the Army transitions to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system for military construction, Fort Hood is incorporating LEED criteria into the Comprehensive Army Master Planning System (CAMPS). CAMPS is an interactive, web-based tool that assists in decision making and builds efficiencies into everyday planning to create and maintain a sustainable installation.

Fort Hood plans to be the first Army installation to build and certify a LEED Silver-level building under the statutory limit of \$750,000 following the release of the Army requirements. The data collected from the LEED building will be analyzed and compared to conventional buildings constructed on Fort Hood and highlight the importance of building "green."

"Fort Hood is demonstrating that a base can focus on the long term environmental sustainability of its facilities while enhancing their suitability for the Soldiers, civilians, families and neighbors, and reducing potential pollution impacts from its daily activities," explained Thomas W. Easterly, Commissioner, Indiana Department of Environmental Management.

Buildings that meet LEED sustainable construction standards typically consume 30 percent less energy and use 20 percent less water than the average. LEED buildings also must comply with American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 62.1-2004, designed to improve ventilation for indoor air quality, and therefore human health and productivity.

LEED construction efforts are part of the installation's Environmental Management System (EMS) which focuses on air quality, energy management, pollution prevention and water quality. Fort Hood's EMS determined that these environmental quality aspects most affect the mission and quality of life of the installation's Soldiers and other inhabitants.

Through its Environmental Management System, Fort Hood is also making strides in Waste Reduction. By analyzing waste streams throughout the installation, Fort Hood implemented reuse and recycle initiatives that saved 3 million gallons of water and recycled 1 million gallons of hazardous waste.

Although the environmental team is responsible for environmental compliance, everyone at Fort Hood has a responsibility to the Army's environmental program. Formal training sessions and briefings were given to Soldiers, Families, civilians, and contractors ensuring environmental awareness across the installation, and helping to reduce the overall environmental impact.

For more information on the U.S. Army Environmental Command, visit <http://aec.army.mil>

The environmental team at Fort Hood is diligent in ensuring that new and returning personnel are educated and updated on the environmental requirements of their organizations, and that all community members have the opportunity to learn about and practice sound environmental stewardship.

Serving the needs of more than 240,000 people, Fort Hood is making environmental responsibility fun. Community-wide events such as Earth Day, Science Day and Texas Recycles Day help educate hundreds of families each year.

For their efforts waste reduction, public awareness, and green building, Fort Hood will receive the Army's highest honor in environmental stewardship -- the Secretary of the Army Environmental Award for environmental quality. The award will be presented to the installation at the Fort Hood 2008 Earth Day Spectacular event on April 22 at Hood Stadium.

- 30 -

This information is provided by USAEC. USAEC is the Army's point organization for supporting the implementation of environmental programs that facilitate sustainable Army training and operations while protecting the environment. We provide environmental program management and technical support products and services in support of Army training operations, acquisition and sound stewardship.

"Sustaining the Environment for a Secure Future"

FY 2007 Secretary of Defense Environmental Awards

Fort Hood, Texas

*Environmental Quality,
Non-Industrial Installation*



Sustaining the Environment for a Secure Future

Fort Hood, Texas

Environmental Quality, Non-Industrial Installation



SUMMARY

Fort Hood, at 217,337 total acres, is the Army's largest armored force active duty post in the United States. Fort Hood is committed to providing an environment amenable to mission readiness, deployability and sustainability; it serves the needs of over 250,000 Soldiers, family members, civilian employees and retirees.

Because air quality, energy management, pollution prevention and water quality most affect Fort Hood's mission and the quality of life of installation residents, Fort Hood's environmental program focuses heavily on these three sustainability and quality of life environmental aspects.

Highlights of Fort Hood's environmental management program include:

- Exceeded the Army's Sustainable Development and Design Policy by planning and implementing all new construction projects to adhere to LEED standards beginning in FY 2006, including a Silver-rated community of 232 homes for Soldiers and their Families
- Analyzed waste streams throughout the installation and implemented reuse and recycle initiatives that saved 3 million gallons of water and recycled 1 million gallons of hazardous waste
- Fostered sustainability through extensive EMS and environmental stewardship training, including 40,984 individuals trained on EMS General Awareness, which corresponds to the EMS policy and training requirements of ISO 14001.

Fort Hood is an Army leader in environmental sustainability – a fact that is demonstrated by the many awards the installation has won – and is recognized by several environmental organizations for being “first” in its environmental protection and promotion efforts.

“Fort Hood is demonstrating that a base can focus on the long term environmental sustainability of its facilities while enhancing their suitability for the Soldiers, civilians, families and neighbors, and reducing potential pollution impacts from its daily activities.”

– Thomas W. Easterly, Commissioner, Indiana Department of Environmental Management

On the cover: Lt. Col. Timothy DeVito, commander of the 4-227 AV Regiment, 1st ACB, 1st Cav. Div., returning to Fort Hood from Iraq, gives high fives to Killeen's Trimmier Elementary School students as he walks into the school for a welcome home ceremony.

INTRODUCTION

Fort Hood, at 217,337 total acres, is the Army's largest armored force active duty post in the United States. Serving the needs of over 246,000 people – including Soldiers, family members, civilian employees and retirees – Fort Hood is committed to providing an environment amenable to mission readiness, deployability and sustainability.

Located in central Texas, Fort Hood originally opened in 1942 as a World War II training center, teaching Soldiers how to use tank destroyers against the German blitzkrieg. The installation has since expanded to become the Army's premier power projection platform, supporting a full range of military operations. It is the only U.S. military installation that is home to two divisions – the 1st Cavalry Division and the 4th Infantry Division – as well as the III Corps Headquarters, the 13th Sustainment Command (Expeditionary), the 3rd Armored Cavalry Regiment, 3rd Brigade 1st Infantry Division and other supporting organizations.

As the Department of Defense continually works to streamline military operations, Fort Hood is regularly looked upon as a model for installation operation and effectiveness. In the DoD's 2005 BRAC report, the Army ranked Fort Hood as the top installation for "Future" capability.

Fort Hood's ultimate vision, to maintain combat readiness, has been achieved through its dedication to high standards for Soldier training and support. The installation's environmental program supports this vision.

BACKGROUND

Fort Hood's environmental program, housed under the Directorate of Public Works, is executed by the Environmental Division. The Environmental Division consists of 104 personnel, including engineers, contractors, subject matter experts and



The 1-21 FA Regiment is presented an award recognizing the battalion for its environmental stewardship as the first Fort Hood organization to score 100 percent green ratings on three consecutive semi-annual environmental compliance assessment.

technicians. There are also 20 certified Environmental Management System (EMS) internal auditors from across the installation. These personnel focus their efforts on solid waste generation, air quality, energy management, pollution prevention and water quality, because the installation's EMS has determined that these environmental quality aspects most affect the mission and quality of life of the installation's Soldiers and other inhabitants.

The Environmental Division is able to maintain a robust environmental program at Fort Hood that supports the installation's elevated operations tempo. With the war, Fort Hood has become a 24-hour a day, 7-day a week operation. In 2007, total troop strength reached over 50,000. In addition to being deployed and re-deployed from Fort Hood, most of these troops also received their training at Fort Hood. Fort Hood had to adapt its training program to accommodate light infantry training as well as armor training; and the coming and going of thousands of troops made continuity at the unit level challenging to maintain. The Environmental Division has been able to support these changes, however, and keep Fort Hood's mission successful by focusing on sustainability and quality of life. Fort Hood's environmental team is diligent in ensuring that new and returning personnel

Fort Hood, Texas | Environmental Quality, Non-Industrial Installation are educated and updated on the environmental requirements of their organizations, and that all community members have the opportunity to learn about and practice sound environmental stewardship.

PROGRAM SUMMARY

Along with the more than 240,000 inhabitants and community members supported by the installation, over 40,000 U.S. Army Reservists and Army National Guard Soldiers have been trained and mobilized from Fort Hood. Considering the sheer number of people that use and rely on Fort Hood’s physical resources, it is understandable that infrastructure maintenance and environmental sustainability is critical to support the installation’s capabilities.

Highlights of the Fort Hood environmental management program include:

- Increased emphasis on constructing sustainable buildings that meet the high Leadership in Energy and Environmental Design (LEED) standards.
- Recycling and reuse strategies that mitigate waste and generate revenue and cost savings.
- Educating Soldiers, installation personnel and community members on the importance of environmental stewardship at all levels.

As a result, Fort Hood is an Army leader in environmental sustainability – a fact that is demonstrated by the many awards the installation has won – and is recognized by several environmental organizations for being “first” in its environmental protection and promotion efforts.

Figure 2. Notable “Firsts”

Clean Texas Member	First DoD installation recognized by the Texas Commission on Environmental Quality as a Clean Texas Member
Partner for Environmental Performance	First Federal facility to join Partners for Environmental Performance, the company 3M, and the Office of the Federal Environmental Executive for EMS implementation assistance
National Partnership for Environmental Priorities	First Army installation recognized by the EPA’s National Partnership for Environmental Priorities; pledged to eliminate light bulbs containing mercury and reduce the use of batteries that contain mercury
Blue Skyways Collaborative	First DoD Installation recognized by the EPA’s Blue Skyways Collaborative for innovative projects that meet air sustainability goals and reduce the Installation’s environmental impact

ACCOMPLISHMENTS

Program Management

Environmental Management System

Fort Hood’s recognized program management structure, its Environmental Management System (EMS), was one of the first in the Army to be developed and implemented. Incorporated into the EMS is a 25-year plan for sustainability. Fort Hood’s sustainability goals are to:

- Use sustainable products and services, with active regional involvement, to minimize waste and environmental impact.
- Actively reduce its impact on regional air quality from all sources.
- Ensure that infrastructure and energy systems are planned, designed, constructed, and maintained to be sustainable and secure.
- Manage training landscapes to support current and future mission requirements while sustaining cultural, natural and land resources.
- Provide high quality potable water and reduce consumption while maintaining mission readiness and quality of life.

Technical Merit

The Fort Hood Environmental Quality Division developed successful master planning and waste reduction techniques during the period of performance that preferentially targeted the reduction of significant sources of waste, and promoted more efficient use of resources. These techniques are found in the installation’s waste

Figure 1. Recent Awards

2007	White House Closing the Circle Award, Waste/Pollution Prevention
2007	South Region Large Facilities /Military Electronics Recycling and Reuse Challenge Award from the Federal Environmental Executive and U.S. Environmental Protection Agency
2006	Recognized by National Registry of Environmental Professionals for EMS and Sustainable Design and Pollution Prevention
2006	White House Closing the Circle Award, EMS Implementation (Honorable Mention)
2006	Tree City U.S.A. Award

Fort Hood, Texas | Environmental Quality, Non-Industrial Installation management program and the Comprehensive Army Master Planning System (CAMPS).

Commitment to Waste Reduction

Fort Hood analyzed waste streams throughout the installation and implemented reuse and recycle initiatives to mitigate unnecessary waste. This emphasis on waste reduction resulted in:

- 319,011 gallons of JP-8 fuel and 245,051 gallons of used oil recycled through the Fort Hood JP-8 Fuel and Oil Recycle Center, eliminating disposal costs and generating \$322,575 in revenue and a cost savings of \$262,289.
- 2,895,000 gallons of water saved from discharge into the sanitary sewer through the use of Fort Hood's Fuel Tanker Purge Facility, a closed-loop system using recycled water to clean fuel tanks. Also, 965 man hours were saved using the fuel tanker purge facility.
- 925,000 gallons of water saved from discharge into the sanitary sewer using the Fort Hood Mobile Kitchen Trailer Wash Facility, a system that cleans and captures pollutants from the mobile kitchen trailers.
- 70,844 gallons of antifreeze recycled, saving \$32,942 in hazardous waste disposal costs.

CAMPS - Comprehensive Army Master Planning System

As the Army transitions to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system for military construction, Fort Hood is using the Comprehensive Army Master Planning System (CAMPS) to achieve its goal of creating and maintaining a sustainable environment and infrastructure. Fort Hood created CAMPS, an interactive web-



Fort Hood's innovative Fuel Tanker Purge Facility was used to clean 193 vehicles, saving 965 man hours and 2,895,000 gallons of water from being discharged into the sanitary sewage system.

based planning tool, to assist in decision making and build efficiencies into everyday planning to create a sustainable installation. This system incorporates Leadership in Energy and Environmental Design (LEED) standards into building design, which allows Fort Hood to readily access and incorporate sustainable design techniques into ongoing and future base construction. LEED is a comprehensive



Fort Hood exceeded the Army Sustainable Development and Design policy by planning all new construction projects to meet LEED standards beginning in FY06.

approach that covers all the aspects of building design: real property management, master planning, National Environmental Policy Act implementation, stationing, development plans and project management.

Fort Hood uses CAMPS to exceed the Army's sustainable development and design policy by planning and implementing all new construction projects to adhere to LEED standards beginning in FY 2006 – two years ahead of the Army's 2008 timeframe. Buildings meeting LEED standards typically consume 30 percent less energy and 20 percent less water. LEED buildings must comply with (American Society of Heating (ASHRAE) Standard 62.1-2004, which helps improve ventilation for indoor air quality, thus improving human health and productivity. Currently, Fort Hood Family Housing is planning construction of a LEED-Homes Silver community. The environmental team is working with Fort Hood Family Housing and Actus Lend-Lease to construct 232 homes for Soldiers and their Families to be completed before the year 2010. The project design phase is completed and construction will begin in March of 2008.

Fort Hood also engaged Soldiers and other installation staff by educating them on the importance of LEED's emphasis on environmental sustainability in regards to mission readiness. For example, Fort Hood's LEED Accredited Professional trained over 90 personnel that are directly involved in building planning, design and construction.

Orientation to Mission

The waste management and CAMPS programs are two environmental quality initiatives that will continue to contribute to Fort Hood's successful execution of its military

readiness mission by ensuring the sustainability of the infrastructure and environment needed to support the installation's many large, active and combat-ready units, as well as the surrounding community. The environmental team also worked, through formal training and general education initiatives, to involve individuals directly responsible for Fort Hood's military readiness mission into its environmental awareness and promotion program.

ECAT Leading the Way

Fort Hood's Environmental Compliance Assessment Team (ECAT) is charged with spreading the word about environmental stewardship and the EMS to all levels of personnel throughout the installation. ECAT's efforts included:

- Conducting 190 briefings, at the request of installation commanders, that have trained 8,424 Soldiers, civilians and contractors on EMS and environmental awareness in regards to installation management and initiatives, deployment and redeployment, and mobilization and demobilization.
- Attending brigade and division staff meetings and working individually with command support to make it easy for leadership to become involved in environmental efforts, and to increase overall environmental awareness.



Working individually with command support to increase leadership involvement and environmental awareness, ECAT member Derrick Born gives Soldiers training about above ground storage tanks during the Environmental Compliance Officer training course. Fort Hood's ECAT conducted 190 briefings and trained 8,424 Soldiers, civilians, and contractors.

- Sponsoring a quarterly awards ceremony to recognize the environmental stewardship of superior units and Soldiers.
- Established a database matrix of unused, available goods that allows organizations to link up and get needed products, preventing unnecessary waste, disposal costs and purchasing costs.

Mission Support Through Education

Fort Hood's environmental policy states that everyone is responsible for protecting the environment at the installation. To promote the idea that environmental stewardship is important at all levels – from the individual family home to the leaders of the installation's many divisions and directorates - the Fort Hood environmental team:

- Conducted 76 training events, including Environmental Compliance Officer courses, that trained 7,923 Soldiers, civilians, and contractors.
- Trained 40,984 individuals on EMS General Awareness, which corresponds to the EMS policy and training requirements of ISO 14001.
- Educated 132 Fort Hood Family Housing residents on how to incorporate conservation into their daily lives through the Nurtured World Consumer Conservation Workshop in FY 2007.

- United States Department of Agriculture
- Texas Parks & Wildlife Department
- Texas Forest Service
- Environmental Protection Agency.

These partnerships provide the installation with support, resources, best practices and subject matter experts to continue its environmental mission. For example, entry into the Clean Texas program has provided reduced inspections, expedited permitting (with reductions from over a year to less than 6 months to finalize permits), free training and assistance in finding grant funding for projects.

Stakeholder Interaction

Commitment to Community Outreach

In keeping with its dedication to environmental education, Fort Hood developed a robust community outreach campaign that includes participation in several community-wide events:

- Texas Recycles Day: Over 300 Fort Hood Families attended, learning about the installation's wide-servicing recycling program.
- Arbor Day: Fort Hood and the City of Killeen together participated in a tree planting ceremony.

Transferability – Knowledge Sharing

Commitment to Partnerships

Fort Hood Partners with organizations and agencies such as:

- Keep Texas Beautiful affiliates
- Texas State & Soil Water Conservation Board
- Central Texas Council of Governments
- Central Texas College
- University of Texas
- Baylor University
- City of Killeen
- City of Copperas Cove
- City of Austin
- Texas Commission on Environmental Quality



Silvia Rhoads, Executive Director of Keep Copperas Cove Beautiful, one of Fort Hood's many community partners, works with the City of Copperas Cove's superhero Recycle Michael to educate students about the importance of reducing, reusing, and recycling at the 2007 Fort Hood-CenTex Earth Day Spectacular Event.

- **Pollution Prevention Week:** An in-depth pollution prevention workshop trained 212 Soldiers. More than 200 Fort Hood Families attended a community learning event on how to prevent pollution and keep Texas clean.
- **Nolanville Elementary Science Day:** 800 students learned about Fort Hood's natural resources and the installation's recycling, energy and water conservation efforts.



Christine Luciano, Environmental Outreach Coordinator, speaks to students about energy conservation and the differences between regular incandescent light bulbs and compact fluorescent light bulbs. More than 800 students were educated about Fort Hood's archaeology, natural resources, recycling, and energy and water conservation programs.

Fort Hood also sponsored a region-wide Earth Day event, bringing together over 1,500 families and 1,800 students from eight school districts throughout Central Texas. Participants learned about sustainable design and construction, innovations in environmentally-friendly transportation, wetland conservation and pollution prevention, among other topics.

Using the medium of television to reach an even wider audience, Fort Hood produced *EnviroMinute*, a series of public service announcements addressing environmental challenges such as illegal dumping, recycling, the household hazardous waste turn-in program, carbon footprint and energy conservation in the Fort Hood community and Central Texas alike. *EnviroMinute* airs weekly on the local PBS station as part of the installation's television show "Fort Hood on Track." The show reaches about 30,000 Central Texas community members.

CONCLUSION

Fort Hood's environmental program plays an essential role in the installation's achievement of mission readiness. In FY 2006 and FY 2007, the environmental team met the challenges that came with an increased operations tempo, demonstrating mission support by providing broad-based environmental training and education to all levels of installation inhabitants. The environmental team also implemented a construction planning system which will help the installation remain sustainable and mission ready for years to come. The team's dedication to recycling and reuse education and community outreach has earned Fort Hood a reputation as a good environmental neighbor and partner throughout Texas.



Jaime Harris, Fort Hood on Track Producer, tapes Christine Luciano, Environmental Outreach Coordinator, for an EnviroMinute segment encouraging Fort Hood residents to be conscious about conserving water and avoiding any possible water shortages during the summer time.