

Judging Criteria

Program Management	PM	Transferability	T
Orientation to Mission	OM	Program Impact	PI
Stakeholder Interaction	SI	Technical Merit	TM

INTRODUCTION

Fort Hood employs approximately 61,786 personnel (41,616 military, 5,667 civilians and 14,503 contractors and other individuals) and has an annual economic impact of \$25.3 billion in the state. Fort Hood is the home of III Corps Headquarters, 1st Cavalry Division, 1st Army Division West, 13 Sustainment Command (Expeditionary) and several separate brigades along with a host of brigade and battalion-sized tenant units and organizations. The installation encompasses approximately 218,823 acres and supports a daily on-post population of 74,798 individuals. Fort Hood’s distinct range and training area capabilities includes its fully integrated live and virtual training capability with joint connectivity, 196,761 acres for range and training land, 76 small arms ranges, 230 aircrafts, 541 Bradleys, 355 tanks and 322 Strykers.

With full engagement and support of Senior Commanders and community partners, Fort Hood continues to focus on Soldier training, family support, community leadership and environmental stewardship.

Fort Hood leads the way for environmental standards in the Army, which is exemplified by the following environmental honors and awards received in FY12-FY13:

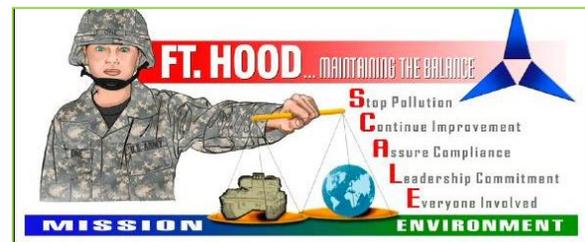
- 2012 Secretary of Defense Environmental Quality Award: Non-Industrial Installation and Team
- 2012 State of Texas Alliance for Recycle’s Environmental Leadership Award
- 2012 Keep Texas Beautiful Award
- 2012 National Public Lands Day DoD Legacy Award
- FY12 SECARMY Sustainability Award: Non-Industrial Installation
- 2013 State of Texas Alliance for Recycle’s

- Environmental Leadership Award
- 2013 Keep Texas Beautiful Award

Fort Hood maintains strong relationships and partnerships throughout the community to include Environmental Protection Agency Region 6, Central Texas Council of Governments, Keep Texas Beautiful affiliates, Texas A&M University-Central Texas, Central Texas College, and surrounding communities, school districts and other organizations.

BACKGROUND

Fort Hood is committed to promoting environmental excellence, reducing its environmental impact, improving the efficiency and costs of processes, encouraging stakeholder involvement and balancing the environment and mission. The Directorate of Public Works Environmental Division plays an active role, seeking opportunities at all levels and increasing environmental stewardship and awareness of Fort Hood’s environmental policy, programs and services. Fort Hood’s SCALE logo is an example of how the installation communicates its goal to balance the environment and mission.



SCALE helps communicate the environmental policy.

The letters associated with the acronym SCALE represent key concepts of the environmental policy: **S**top pollution, **C**ontinue improvement, **A**ssure compliance, **L**eadership commitment, and **E**veryone involved. More than 200 SCALE logo signs are strategically placed throughout the installation to remind personnel that everyone is responsible for protecting and preserving the environment.

The SCALE logo also supports the environmental management system (EMS)

goals to help identify environmental issues, ensure procedures are in place and improve tasks related to the environment. Fort Hood’s successful EMS enhances efficiency, reduces waste and helps ensure compliance with Federal, State and local environmental regulatory requirements. The installation has integrated environmental accountability and responsibility into daily activities and is working to strengthen communication among stakeholders.

 The Environmental Quality Control Committee is an example of how the installation provides a forum for open lines of communication to increase environmental performance and help integrate sustainability principles. The committee is chaired by the Fort Hood Commanding General and Garrison Commander. Quarterly, military and civilian leaders work together to plan and execute decisions related to environmental protection, installation sustainability, military land stewardship, natural resource conservation, energy efficiency and significant aspects identified by the EMS. Meetings include tours of environmental facilities and motor pools to increase awareness of environmental programs and services available, educate new commanders and share lessons learned.

 Meetings, trainings, environmental partnerships and community events are important tools for keeping everyone involved and promoting environmental stewardship. Outreach efforts include:

- Online EMS training for employees and contractors via Fort Hood’s environmental learning management portal.
- Annual environmental school events for Pollution Prevention Week, Eco-Harvest, America Recycles Day, Geographic Information Systems Day and Earth Day.
- Environmental articles in the installation’s newspaper, Fort Hood Sentinel and local newspaper, Killeen Daily Herald.
- Program specific training (Recycle,

Energy, Water, Natural Resources, Cultural Resources, Air Quality, Solid Waste and Hazardous Material).

- Cen-Tex Sustainable Communities Partnership that includes Fort Hood and surrounding communities (Killeen, Harker Heights, Gatesville and Copperas Cove).
- Quarterly Net Zero Waste workgroup meetings and annual workshops.
- Installation-wide fall and spring clean-ups and yard sales to promote reducing, repurposing and recycling materials.

Fort Hood also continues to lead the way in environmental performance as a Net Zero Waste 2020 pilot installation. The slogan “2020: Perfect Mission, Perfect Vision,” emphasizes that reaching Net Zero Waste will take a community effort to recycle and repurpose more and waste less.

ACCOMPLISHMENTS

EMS

 Fort Hood’s robust EMS supports the installation’s elevated operations tempo and mission priorities. Its environmental strategy is to use a systematic approach to identify and manage significant environmental impacts that can occur as a result of its activities. EMS helps Soldiers, civilians, and contractors document procedures in place, identify environmental vulnerabilities and examine how to improve environmental processes. The EMS Coordinator conducts annual internal audits, aspect reviews, and interviews and evaluates EMS conformance of military, civilian and contractor activities. The Environmental Division plans and executes its EMS based on the findings of audits, presents them at the Environmental Quality Control Committee and continually improves.

 In April 2011, Fort Hood was selected as a Net Zero Waste 2020 installation. The EMS objectives were then rewritten in four phases to support this initiative and long-term sustainability goals:

- Phase 1 (2011-2012) Plan & Organize, 45 % Diversion Goal
- Phase 2 (2012-2015) Initial Implementation, 60 % Diversion Goal
- Phase 3 (2015-2018) Assess & Adjust, 75 % Diversion Goal
- Phase 4 (2018-2020) Full Implementation, 85 % Diversion Goal

 Achievement of the EMS objectives resulted in the following positive outcomes:

- Increased diversion rate by 20% since the implementation of the Net Zero Waste program to a current diversion rate of 48%.
- Exceeded the Qualified Recycling Program goals by processing 7,629 tons of recyclables generating \$1,564,564 in FY12 and 8,291 tons of recyclables, generating \$1,626,560 in FY13.
- Recycled and reissued 27,531 pounds of household hazardous and electronic waste in CY12 and 17,459 pounds in CY13, respectively 86% and 81% of total collected.
- Trained approximately 2,672 employees in FY12 and 1,109 employees in FY13 via the online EMS training.
- Energy consumption was set to be reduced 3% annually. Fort Hood is ahead of schedule with a reduction in consumption of 11% under the established glide path in FY13.

WASTE REDUCTION EFFORTS

 **Qualified Recycling Program:** The Fort Hood Qualified Recycling Program boasts the largest recycle facility in the Army. Through education and outreach, the recycle program increased the amount of materials recycled. In FY12, the recycle program collected 7,629 tons of recyclables, generating \$1,564,564. In FY13, the recycle program expanded its recycle products to include all plastics 1-7, small household appliances, athletics shoes and holiday lights. In February 2013, the recycle program coordinated a solution for styrofoam

to collect and process the materials internally. Styrofoam is fed into a machine, melted and rolled out into a coil. In 2014, approximately 3,000 pounds of styrofoam recycled.

 Another successful element of the recycle program is its partnerships with Killeen Independent School District and the cities of Harker Heights and Gatesville. The district was challenged with limited staff of only 2 individuals to collect and bale from 60 different campuses. The partnership created recycle efficiencies for the district and in FY12-FY13 generated 104 tons. The city of Harker Heights and Gatesville also needed resources for a recycle program and partnered with Fort Hood to create recycling collection points within their communities. Fort Hood also partners with Centex Scrap and Metal to coordinate electronics and household appliances collection events. In 2013, two events collected approximately 18,700 pounds of electronic waste and household appliances. As a result of the expansion, the amount of materials collected in FY13 increased by 8.67% to 8,291 tons and generated \$1,626,560. Money generated from recycling pays for the program costs, capital improvements and funds community outreach activities, such as Freedom Fest fireworks, Oktoberfest, Earth Day, Single Soldiers Day and other events. Approximately \$100,000 in FY12 and \$90,000 in FY13 was returned back to the installation to support these events.

 **Net Zero Waste 2020:** Fort Hood representatives are working together for a greener and sustainable future to meet its goal of eliminating landfill waste by 2020. Fort Hood's slogan "2020: Perfect Mission, Perfect Vision," emphasizes a community effort to recycle and repurpose more and waste less. In February 2013, Soldiers, airmen, civilians and contractors participated in the second annual Net Zero Waste workshop to discuss ideas for reducing, repurposing, recycling, marketing and outreach.



III Corps and Fort Hood Commanding General Lt. Gen. Mark Milley addresses participants at the 2nd annual Net Zero Waste workshop.

The work groups' leaders develop targets, objectives and action plans with their team members and brief their progress to the Commanding General quarterly at the Environmental Quality Control Committee.

Some of the initiatives include:

- Issuing reusable cups honored by Fort Hood vendors for beverages.
- Maximizing digital and paperless processing.
- Including a clause in contracts to reduce packing materials for items order.
- Redistributing excess materials through a "Hood list" with the same concept as Craigslist.
- Creating a centralized location for garage sales.



Positive outcomes of the Net Zero Waste program have resulted in:

- The creation of Recycle Coordinators at company/branch level and Recycle Councils at director/commander level.
- Fall and spring installation-wide yard sales that provided to donate 13,130 pounds of materials local charities in FY12-FY13.
- Successful implementation of single stream recycling program in family housing that increased the amount of recyclables collected in FY13 by 27% to 1,608,737 pounds, averaging 23 pounds of recyclables per month per household.
- A partnership with the commissary and local pig farmers to prevent spoiled fruit, vegetables and baked goods from ending up

in the landfill, which in July-September 2013 has diverted 22,042 pounds.

- In FY13, a donation from the Fort Hood Holiday Inn Express to 175 Soldiers facing hardships that totaled 77,180 pounds of furnishings and mattresses.
- In FY13, a donation from Housing to non-profit organizations that totaled 210,162 pounds, 1,116 beds and 1,114 mattresses.



Non-Potable Water for Golf Course: The

Directorate of Public Works and Directorate of Family and Morale, Welfare and Recreation worked together on an alternative for the installation's golf course irrigation system to pump non-potable water from a small lake into the golf course's irrigation pond. Water used for irrigation of the golf course typically makes up about 5% of the total potable water use of Fort Hood. This project helps meet the goals of Executive Order 13123 by replacing treated, potable water with raw surface water to irrigate the golf course, which to date has pumped 117,185,023 gallons of water.



Environmental Corner: Successful

pollution prevention projects are located in an area known as the Environmental Corner, which includes a mobile kitchen trailer (MKT) /compact kitchen (CK) wash bay, tanker purge facility and JP-8/oil/anti-freeze recycle center.

MKT/CK: The MKT/CK cleaning facility facilitates easier cleaning of the tactical kitchen trailers in a closed loop pretreatment system. During FY12- FY13, the MKT/CK was used 178 times and prevented approximately 1,250,000 gallons of polluted water from entering the sanitary sewer.

Tanker Purge Facility: The purge facility also recycles water in a closed loop system which is reused many times before being flushed and filtered into another holding tank. During FY12-FY13, the purge facility was used 192 times and saved approximately

1,248 Soldier manhours and 2,880,000 gallons of water from being discharged into the sanitary sewer.

 JP-8/oil/antifreeze Recycle Center: Used oil, antifreeze and off-specification JP8 fuel are collected, cleaned and stored at the Environmental Corner to be sold for recycling. During FY12-FY13, 98,598 gallons of JP-8 fuel, 265,875 gallons of used oil, and 45,561 gallons of antifreeze was collected, generating \$206,920.

ENVIRONMENTAL COMPLIANCE ASSESSMENT

 Environmental Compliance Assessment Team (ECAT): ECAT is charged with distributing information about environmental stewardship and the EMS to all personnel throughout the installation. Fort Hood's ECAT helps their customers find solutions and achieve environmental success by ensuring they are informed of environmental regulations and policies and receive required training.

 During FY12-FY13, ECAT conducted 430 formal assessments, 230 courtesy assessments, 1,292 assistance visits and 68 facility closeouts. ECAT also conducted 121 environmental briefs and trained 12,069 personnel. ECAT goes through steps to help the organization identify deficiencies, help correct them, and then formalize procedures and policies to prevent further occurrences. Semiannually, ECAT audits each organization's EMS based on environmental significance. The internal audits give the opportunity to educate, inform and provide innovative solutions to minimize environmental vulnerabilities and impacts on the installation, which has been instrumental in Fort Hood's continuous improvement process.

 Environmental Trainer: Fort Hood's Environmental Trainer has developed several effective environmental courses to train personnel on the environmental aspects of their activities. During FY12-FY13, the Environmental Trainer trained 658 individuals

as Environmental Compliance Officers (ECOs). This week-long comprehensive course includes classroom training and visits to significant areas, such as the recycle center, the HazMart, a unit motor pool and the Classification Unit. The course also includes program specific training in recycle, energy, water, natural resources, cultural resources, air quality, solid waste and hazardous material. The Environmental Trainer also  trained 145 individuals as ECO Assistants,  214 ECOs in the ECO Refresher course, 1,340 individuals in unit training and 1,797 individuals in quarterly training.

EFFECTIVE USE OF FUNDS

 Renewable energy projects, the Classification Unit and battery charging program are examples of how Fort Hood reduces expenses, extends the life and reuse of products, increases energy performance and conservation while improving the efficiency and reducing costs of processes, saving the installation money.

 Renewable Energy: In March 2012, Fort Hood and USFH, a privatized housing partner, activated a solar farm of nearly 3,000 photovoltaic (PV) panels that will generate 1 million kWh of renewable energy annually.



The solar field of 3,000 PV panels will generate 1,000,000 kWh of renewable energy annually.

 The \$3 million project did not cost the Army or taxpayers anything. In FY13 the solar farm produced 1.2 million kWh, generating 25% of energy for the overall load for 300 single-family homes. In another renewable energy project, the Energy

Management Branch set a goal in FY12 to build the first Net Zero Energy facility on Fort Hood and completed the project in FY13. The design included energy and water efficient technologies like Energy Star products, Solar PV System, smart faucets, low flow toilets and point-of-use hot water systems to provide the greatest return for energy and water savings.



The Solar PV System will generate over 140,105 kilowatt-hours per year, with a savings of over 91 tons of carbon

dioxide. Currently during the monitoring period of May-September 2013, the Solar PV System has provided 110% of the required load. Also as a result of conservation and renewable energy efforts, the installation is 11% under the established glide path for energy



Classification Unit (CU): One of the CU's programs is the Household Waste and Residential Electronic Waste Collection program, which allows for DoD personnel and their family members to dispose of household hazardous and residential electronic waste for free. Products are properly disposed of,



recycled or repurposed for reuse. The program recycled and reissued 27,531 pounds of household hazardous and electronic waste in CY12 and 17,459 pounds in CY13. Also during FY12-FY13, approximately \$1,596,422 of excess materials was turned in by Soldiers, civilians and contractors, and 75% of those materials was reissued and reused by other units or recycled.



Battery Charging Program: In 2012, Fort Hood created 16 battery charging stations to facilitate savings in using, maintaining and disposing of military, commercial, and rechargeable/reusable batteries. The program ensures maximum usage of battery charging stations and limits the disposal of automotive batteries that can be reused on the installation while improving the efficiency to extend the life of the batteries and save the installation

money. As a result, the battery charging program saved \$426,167 in FY13.

COMMUNITY RELATIONS

Cen-Tex Sustainable Communities

Partnership: The partnership was created in 2009 with the surrounding communities of Killeen, Copperas Cove, Harker Heights and Gatesville and is dedicated to serving as a forum for regional sustainability issues. The partnership includes city managers, the Garrison Commander and voting members. Currently, the main project of the partnership is Regional Recycling. The committee is researching private industries interested in building a single stream recycling facility in the



region. As a result, Fort Hood established single stream recycling in family housing and the amount of recyclables collected in FY13 increased by 27% to 1,608,737 pounds, averaging about 23 pounds a month per household. Copperas Cove took the next step forward in single stream and began the first phase of implementation in January 2013 and will complete it within 2-3 years.



Environmental Outreach Events: Each year, Fort Hood hosts several events like America Recycles Day and Pollution Prevent Week school events which feature a tour of the Recycle Center and a series of environmental presentations from community partners.



Miguel Graciani races to put the items either in the trash or in the recycling bin at Fort Hood's Earth Day.

The Earth Day school event is Fort Hood's largest environmental outreach event that includes more than 20 partners coming out to educate more than 750 students each year.

Fort Hood also participates in Keep Copperas Cove Beautiful annual Eco-Harvest event that educates more than 800 students each year and the City of Killeen's annual Geographic Information Systems Day event that educates more than 1,100 students each year. Fort Hood's outreach efforts at schools and community events, tours at the recycle center, briefings and trainings, impact more than 15,000 individuals annually.

 **National Public Lands Day:** In the fall of 2012, the installation received a grant to build an educational and interpretative garden site for butterflies, bees, bats and birds. Fort Hood partnered with Keep Copperas Cove Beautiful, Copperas Cove 4-H and the City of Copperas Cove and 135 hours were volunteered to lay mulch, compost and plants to build a bird, bee, butterfly and bat garden.

 The garden is a tool to showcase environmentally responsible landscaping practices for the installation; and address areas of beautification, native vegetation and wildlife habitat.

NATIONAL ENVIRONMENTAL POLICY ACT

 Early involvement of the NEPA program at Fort Hood is the primary methodology used to ensure that all decision makers understand the impacts to human health and the natural environment prior to making final decisions regarding projects. This is accomplished by the NEPA staff working with the engineers within the U.S. Army Corps of Engineers, and Fort Hood DPW's Engineering and Master Planning Divisions on projects from the conception stage. Having input on a project from the beginning enables the long-term goals of the installation to be integrated with environmental requirements. Fort Hood's NEPA documentation identifies specific waste minimization methods that must be implemented during project construction, demolition, and use of facilities and ranges to continually promote the long term viability of resources. Inspections are conducted on

project sites throughout construction to ensure these methods are implemented. A final inspection is also performed to ensure that all sustainable efforts have been affective.

 Senior management at Fort Hood are consistently involved in the consultation process and working with the State of Texas and local Native American tribes to include the Comanche, Apache of Oklahoma, Caddo Nation, Comanche Nation, Kiowa Tribe of Oklahoma, Mescalero Apache, and Tonkawa Tribe of Oklahoma and Wichita and affiliated tribes. Because Fort Hood uses the Army's Alternative Procedures for Cultural Resource preservation, NEPA documents and analysis are forwarded directly to these entities in order to obtain their input. Fort Hood is very sensitive to the fact that these organizations may have several projects to review. Any questions posed by the Tribes or other agencies are responded to in writing and include a detailed explanation.

 Proposed actions, vital to installation operation, combat readiness and quality of life were analyzed IAW NEPA, with the majority being approved at the categorical exclusion level. The NEPA team drafts, reviews and finalizes Environmental Assessments and Environmental Impact Statements in support of numerous military training and quality of life projects including community life centers, child care facilities, chapel complexes, stadium and post exchange facilities, modified and sustainable range projects, dental facilities and a new hospital complex.

 The NEPA team acts as a liaison between the Environmental Division, other divisions, directorates and outside stakeholders and organizations. The team facilitates and coordinates design, development and project reviews on all cantonment and range projects, and ensures that best management practices are carried out throughout the project.