Introduction: Fort Hood is the home to the largest and most successful Qualified Recycle Program in the Army. The Recycle Team is dedicated to supporting the program and its mission 'to reduce the amount of material sent to the landfill, 50 percent diversion goal of non-hazardous solid waste by the year 2015, generate funds through the sale of materials, and support environmental stewardship on and off Fort Hood.

The installation's environmental management system (EMS) determined that recycling is one of the important environmental quality aspects that most affect the mission and quality of life of the installation's Soldiers and other inhabitants. Fort Hood's requirement to maintain combat readiness has been achieved through its dedication to high standards for Soldier training and support. The team and division work to sustain a robust EMS that supports the installation's elevated operations tempo and mission priorities.



To support the Recycle Team's mission, the recycle regulation was rewritten and published in 2007 in Fort Hood Regulation 420-6 and prescribes policies, assigns responsibilities, and establishes procedures for protection of the environment and preservation of natural resources through solid waste management and recycling. This regulation applies to units and activities assigned, attached, conducting training, or residing on Fort Hood as tenants; contractor activities and leases located within the limits of the Fort Hood military reservation; and members of Family housing. Participation in the Fort Hood Recycling Program is a requirement, not an option.

Background: Fort Hood's Recycle Program, managed by the Environmental Division under the Directorate of Public Works (DPW), consists of 48 personnel. The Recycle Team is proactive and determined to be part of the solution to environmental issues at Fort Hood. The Recycle Team has demonstrated exceptional leadership and established an efficient and cost effective. self-sustaining program that enhances the environment, promotes litter prevention and increases sales of recyclable material. The Recycle Team is involved in external and internal committees and boards and has a strong relationship with the community outside the gate. On an installation that supports more than 395,000 people, it takes everyone's involvement

Program Management: The Team focuses on five pillars- outreach, collection, processing, sales, and scale operations. Each fiscal year, the Team establishes goals and objectives in align with the recycle mission and pillars to divert recyclable material from solid waste with continuous improvement of operation while saving landfill disposal cost and preserving natural resources. The following are some of the Teams goals and objectives that are outlined in the Recycle Business Plan.

to achieve a greener and sustainable future.

FY10 Goals and Objectives:

- To support the Department of Defense's (DoD) diversion goal of 40 percent by FY10
- To collect 9,000 tons of recycle material
- To generate \$1,350,000 thru sales
- To educate the public on recycling
- To increase recycling from military and retires living off-post
- Be environmental stewards
- Look for new products to collect, process, and sell
- Continuous improvement of operation
- Support EMS
- Establish a secured shredding area for top secret and secret material
- Improve the satellite point at North Fort Hood (NFH)
- Provide at least four displays during the year
- Support Fort Hood with recycle support
- Adhered to all applicable rules and regulations

- Collect and shred 500 tons of secret and confidential material
- Relocate baler to NFH and process cardboard from NFH



FY11 Goals and Objectives:

- To support the DoD diversion goal of 50 percent by FY15
- To collect 10,000 tons of recycle material
- To generate \$1,450,000 thru sales
- To preserve our natural resources and to save money through the diversion of solid waste cost avoidance
- Employee well being
- Customer service
- To provide quality service to Fort Hood
- Award and recognize at least one employee each quarter thru the Installation Employee of the Quarter program
- Add one ICE comment per week
- To process all material collected and received
- To sell all material collected and received
- To provide training to Environmental Compliance Officer classes
- Provide outreach as needed to the surrounding communities

Technical Merit

Fort Hood Recycle Center: The Fort Hood Recycle Program boasts the largest recycle facility in the Army. Through education and outreach, the Recycle Team increases the amount of materials recycled. When Fort Hood's environmental staff initiated the recycle program in 1992, it sold 600 tons of recyclable material. During FY10 and FY11, the recycle center sold 17,521 tons of recyclable material, including cardboard, white paper, office pack, mixed paper, newspaper, maps, plastic, pallets, toner cartridges, cooking oil, aluminum, brass and scrap metal.

Processing: The Fort Hood Recycle Program outgrew its original 17,500 square foot processing facility and expanded it to 28.625 square feet. This expansion accommodated the modern balers (which include new auto-tie cardboard and paper balers capable of processing up to 10 tons per hour), sorting lines, perforators (for plastic bottles), magnetic sorts (for aluminum/steel cans) and paper shredders (including a high output unit). The Recycle Program's efficiencies are supported by material handling equipment like forklifts, loading ramps, new pallet and scrap irons storage yard, and a team with a can-do attitude. The Recycle Program's indoor storage capacity is approximately 400 material bales, equating to approximately 350 tons of material ready for shipment. Management views the Recycle Program as a business venture, helping it remain successful. In such a venture, raw materials are routinely collected, processed, quality controlled and marketed.

Collection: Fort Hood has conducted a detailed assessment of all activities to determine the production potential of recyclable materials and updates this process continually with the cooperation of military units, civilian activities and solid waste contractors. The Recycle Team ensures the appropriate number and type of collection containers to capture recyclable materials (i.e. containers inside buildings collect office style paper products and aluminum cans). To help Soldiers in their recycling efforts, the Recycle Team issued each company level unit four 35-gallon recycle containers and 10 small desk-side containers. During FY10 and FY11, the Recycle Team provided Fort Hood military units with more than 5,000 35-gallon recycle containers, desk-side containers and wire containers at no cost, which in turn saved the installation approximately \$150,000. Effective Sep. 1, 2003, the Recycle Team took over the collection program on Fort Hood. Previously, a contractor collected an average of 350 tons of recyclable materials a month from 800 three yard containers. The Team analyzed the cost effectiveness and efficiency of providing the collection service themselves and expanding to include bulk collection. Bulk collection is valuable service for civilian, contractor, and

military activities on the installation. Activities can request for the Team to provide a state bed, box truck, or roll off at their facilities to collect bulk items of scrap metal, cardboard, or files. After 90 days of taking over the collection service, the Team increased the amount of recyclable materials collected to an average of 500 tons a month. The Team's collection services have generated increased recyclable materials and funds in support of its mission.



The Recycle Team expanded the recycle collection by receiving materials from the city of Killeen's community recycling center and also works with the city of Copperas Cove to accept their recyclables. Copperas Cove's recyclables are collected at community drop-off points, which average about 2,500 pounds monthly. The Fort Hood Recycle Team has also coordinated with six community post offices in the cities of Killeen, Harker Heights, Belton, Temple and Fort Hood to collect undeliverable third-class mail. each averaging 9,500 pounds per week. In supporting the continued partnerships within the Central Texas communities, seven moving and storage companies deliver their cardboard directly to the Fort Hood recycle center. This partnership saves the companies solid waste charges that would normally be charged by their city waste transfer points. The Recycle Team's goal is to collect/receive 100 percent of all cardboard generated on Fort Hood, to include cardboard generated during permanent change of station moves.

<u>Sales:</u> During FY10 and FY11, the Recycle Program generated \$4.12 million with Defense Reutilization & Marketing Service sales assistance. Money generated from recycling pays for the Recycle Program, capital improvements and other community projects, such as Freedom

Fest fireworks, Welcome Home celebrations, carnivals, and the annual Earth Fest. During FY10 and FY11, \$428,000 was provided to support Fort Hood pollution prevention projects and \$164,000 for Family and Morale, Welfare and Recreation events.

Orientation to Mission Recycle Management and the Environmental Compliance Assessment Team: The Recycle Team works with the Environmental Compliance Assessment Team (ECAT) to spread the word about environmental stewardship and the EMS to all personnel throughout the installation. Fort Hood's ECAT helps Soldiers and civilians find solutions to achieve environmental success. ensuring their customers are informed of Fort Hood's environmental regulations and policies. and receive required training. When ECAT is informed that an activity seeks recycle assistance, ECAT works with the Recycle Team to help meet the activity's recycling needs. ECAT's strong relationship with its customers helps teach, train and inform activity staffs about Fort Hood's environmental programs and services like the Recycle Program. Semiannually, ECAT audits each organization's EMS based on environmental significance in the areas of hazardous material, pollution prevention, air, water, energy, and solid waste and recycling.

Environmental Compliance Officer Course and Quarterly Training: During FY10 and FY11, 556 Soldiers, contractors, and civilians were trained as Environmental Compliance Officers (ECOs). The week-long training helps ECOs recognize compliance requirements, as well as the intent and reasoning behind the requirements for all of Fort Hood's environmental programs. This comprehensive course includes classroom training, and visits to the recycling center and the HazMart, as well as other areas to help ECOs understand the environmental aspects and impacts of their unit's daily activities so they can train their co-workers on how to comply with all applicable regulations. The Recycle Team participates in the course and during the ECO tour of the recycle facility, the staff explains program operations, importance of recycling on the installation, and how recyclable materials support the Soldiers and the Fort Hood

community. Fort Hood also hosts quarterly environmental training events for units on the installation. The training covers several topics each session including recycling. Commanders and leaders send their personnel to receive up-to-date environmental information. During FY10 and FY11, 950 personnel took advantage of this easy option to comply with quarterly environmental training requirements.



Recycle Challenge and Cardboard Recycle Buyback Program: The Recycle Team developed a recycling incentive program called the Commanding General's Recycle Challenge including quarterly awards for units. The company-sized unit that delivers the most cardboard between January and March receives \$1,500; second place receives \$1,000; and third place receives \$500. Between April and June, the focus is on paper products; July through September focuses on plastic; then from October through December the focus is aluminum cans. In 2010, the Recycle Program collected additional material totaling 172,987 pounds of recyclable materials as a result of this challenge. The Recycle Team also developed the Cardboard Recycle Buyback Program. Maj. Gen. Will Grimsley initiated the buyback program in September 2010 as an incentive to military units to recycle cardboard. Each company-sized unit that delivers cardboard is paid 10 percent of the average market price at the end of each quarter. Since the buyback program started, the Recycle Team has collected additional cardboard totaling 43,406 pounds.

Transferability <u>Environmental Quality Control Committee:</u>

The Environmental Quality Control Committee (EQCC) meeting, conducted and chaired by the III Corps Chief of Staff and the Garrison Commander, meets quarterly. The EQCC

coordinates the installation's environmental programs to preserve and enhance the environment and ensure compliance with laws, regulations and policies. Military and civilian leaders on this committee collaborate to plan and execute decisions related to environmental protection, installation sustainability, military lands stewardship, natural resources, energy efficiency and the EMS. During each meeting, the installation's environmental challenges and successes for the quarter are discussed to identify the root cause and learn how military and civilian activities can improve. The Recycle Team reports the amount of recyclable material collected and processed each quarter, demonstrates accomplishments of its goals, and discusses upcoming recycle events. The meeting provides a forum for open lines of communication between both the military and civilians to increase environmental performance and help integrate sustainability principles.

Newcomer's Brief and Hood Howdy: The monthly Newcomer's Brief and the semiannual Hood Howdy are both information fairs in which the Recycle Team participates to educate new Soldiers and Family members with information on services and facilities available within the installation and in the surrounding communities. The Recycle Team takes advantage of this opportunity to inform new Soldiers and family members about recycling and how it benefits the installation and community villages.

Community Service Council Meeting:

The Community Services Council is a monthly community-wide forum that brings about awareness of Fort Hood and area community events to key representatives of military and civilian activities on the installation. The Recycle Team presents checks to the winners of the Recycle Challenge each quarter, increases awareness about special recycle events and informs them of recycle programs and services available at the Community Services Council meetings.

Qualified Recycling Program Management

<u>Course:</u> The Recycle Team's success is recognized nationwide as it is consistently asked to reach out to other Department of Defense

installations to teach them how to improve and make their recycling programs more efficient. The Recycle Team has helped eight installations and is currently working with Fort Bragg and multiple Air Force bases to establish qualified recycling programs (QRP). The recycling experts at Fort Hood annually teach a QRP management course to help students understand the principles and techniques in implementing a sound QRP. learning what products can be recycled, what products are prohibited from recycling, QRP regulations, necessary processing equipment, collection and sorting methods to maximize returns, working with DRMO, establishing contracts, recording transactions, DoD recordkeeping and estimating future budgets. Fort Hood's Recycle Program is an exemplary cost-effective, profit-making, self-sustaining program used as a benchmark by others.

Cen-Tex Sustainable Communities

Partnership: The Cen-Tex Sustainable Communities Partnership was launched at Fort Hood's Earth Fest event on April 24, 2009 with a memorandum of understanding between surrounding communities. The initiative is a partnership that involves Fort Hood and the communities of Killeen, Copperas Cove, Harker Heights and Gatesville. Together they establish planning goals that have long-term environmental, economic and social benefits for the region. City managers, planners, the Fort Hood Garrison Commander and environmental professionals met together in September 2009 for a two-day pre-planning meeting to develop an approach to promote sustainable development, growth and living in Central Texas. Each of the communities shared their goals and green initiatives. This regional planning effort establishes long term goals that respect the cultural heritage of the region and its residents while offering services to provide a high quality of life; ensuring availability of material resources (natural, agricultural, and man-made); promoting sustainable development and land use; creating efficient transportation systems; and enhancing economic development for these communities now and into the future.



The Cen-Tex Sustainable Communities
Partnership initiated a feasibility study for a
regional recycling facility. The study will be the
first around a military installation and will analyze
cost sharing and profit sharing. The success of
Fort Hood's recycle program, the largest in the
Army, is the impetus for the initiative. Fort Hood's
program is self sustaining and supporting other
community events and pollution prevention
projects. The partnership will host a regional
recycling forum in November 2011 to discuss pay
as you throw, single stream collection, and new
ways to collect and process recyclables with
Central Texas community members.

Stakeholder Interaction

Pollution Prevention Week: During the third week of September, Fort Hood celebrates National Pollution Prevention Week. In 2010, Fort Hood's event included training for more than 180 Soldiers, civilians and contractors. Presentations about storm water pollution prevention, the payback of recycling, energy conservation, and natural resources conservation were part of the event. Fort Hood also hosted a school event at the recycle center for more than 100 4th graders. Each of the students brought an item to recycle and also filled out a pledge card to make a commitment to prevent pollution at home and at school.



The students participated in a series of environmental presentations about storm water pollution prevention, natural resources, pollution in space, energy conservation and preventing hazardous materials entering into the environment. The school event also included a tour of Fort Hood's recycle center and daily operations. In 2011 more than 80 Soldiers, civilians and contractors attended the training event with the grade students.

Household Hazardous and Bulk Recycle Turn-In Event: During August 2010, a household hazardous and bulk recycle turn-in event was hosted in conjunction with the installation's spring cleanup. Environmental staff, the Recycle Team, and Fort Hood Family Housing partnered together to remind the Fort Hood community to think green by safely disposing of unwanted household hazardous waste, like oil-based paint, pesticides, and batteries, as well as electronic waste. The Fort Hood community diverted truckloads of waste that could have ended up in the landfill. The Fort Hood Recycle center collected scrap metal, tires with rims, undamaged batteries, and other recyclables from the Fort Hood community. During the event, the environmental staff promoted the services available at Fort Hood to dispose of recyclables, electronic waste and household hazardous waste. The event will continue quarterly.

Recycle Partnership with Killeen Independent School District: The Recycle Center and Killeen Independent School District (KISD) formed a partnership in February 2011, resulting in the garrison providing recycle services to two elementary schools. KISD is challenged with limited recycling services. The district has one individual to collect recyclables from 60 different campuses and another individual to bale the material. The partnership is an example of how installations and communities can work together to cut costs, increase recyclables and improve education. The partnership has increased recycle efficiencies for the district and helps give back to the Fort Hood community. The Recycle Center has set up recycle dumpsters to collect cardboard, all paper, mixed steel, aluminum cans and plastic. The pilot program was a success and the recycling effort was extended to two

middle schools and seven elementary schools, collecting 10.213 tons of recyclable material during FY11.

<u>Partnering with the Boys and Girls Club and</u> Child, Youth and School Services:

In September 2010, more than 150 students from the Central Texas Keystone and Torch clubs participated in a leadership conference that included a community service project to paint environmental murals on 30-foot-long roll-off recycle containers. The community service project was a partnership between the Boys and Girls Club, DPW Environmental, Recycle Center, and the Child, Youth and School Services.



The recycle containers are used at recycle dropoff points at the Clear Creek and Warrior Way Commissaries and are reminders to the Fort Hood community to recycle.

America Recycles Day: Each year in November, Fort Hood celebrates America Recycles Day. In 2009 and 2010, an open house was held at the recycle center. During the 2009 open house, the Recycle Center paid \$.50 a pound for more than 2,000 pounds of aluminum cans from the first 50 individuals. Each visitor received free giveaways to help them in their recycling efforts.



In 2009, the Recycle Team hosted an America Recycles Day school event. More than 180 4th

graders toured the recycle center and shuffled through presentations from Keep Copperas Cove Beautiful, Central Texas College and DPW Environmental. In 2010, the Recycle Center paid \$.50 a pound for more than 1,100 pounds of aluminum cans, and attracted more than 300 4th grade students for the school event.

Earth Fest: Each year in April, Fort Hood hosts an Earth Day event to bring awareness that environmental stewardship is important to all Family members, Soldiers, civilians, and leaders of the installation's many divisions and directorates. The event is hosted and supported by the DPW Environmental Division and the Fort Hood Recycle Team.



The 2010 Earth Fest event attracted more than 12.000 people and 1.100 students from five different Central Texas communities. Students were shuttled from one exhibit to another inside a huge 300 by 100 foot circus-style tent. More than 35 different exhibits taught students about recycling, renewable energy resources, endangered species, natural resources, water conservation and other environmental topics. The 2011 Earth Fest event expanded its partnership with the annual Month of the Military Child Fest. More than 18,000 people and 1,700 students from Central Texas school districts attended the environmental education event. In the early afternoon and evening, the free event was opened to the public. Features of the event included environmental displays from ONCOR, Coca-Cola, Home Depot, USO, Keep Texas Beautiful Affiliates, Green Mountain Energy, and other environmental organizations, free food and drinks, and live entertainment.

'Don't Share It, Shred It' Community Event

The Fort Hood Garrison Installation Security Division and Recycle Center partnered together to provide shredding services throughout October in support of Security Awareness Month. The event encouraged community members to guard against identity theft, help the environment, and eliminate clutter by participating in the 'Don't Share It. Shred It' community shred event. Shredding unwanted documents like old bank statements, paycheck stubs, old tax records, credit card offers, old bills, and anything with personal information reduces the risk of becoming an identity theft victim. The community event and the recycle center's regular shredding services allow individuals to get rid of it all securely.

<u>Christmas Parade:</u> Each year, the Recycle Team and its mascot, Ricky the Raccoon, participate in the city of Killeen's annual Christmas Parade. Encouraging Central Texans to recycle, the Recycle Team build its floats out of paper, plastic, cardboard, and other materials from the recycle center.



In 2009, the Recycle Team built a carousel with children sitting in the float; and in 2010, a Disney-like castle glowing on top of a hill looked down at gingerbread men, candy canes, and Ricky the Raccoon reading a Christmas story to children around a campfire of logs and lights. Each year member of the Recycle Team walk along both sides of the float, greet hundreds and pass out candy to children lined up with their buckets and bags. Both years, the Recycle Team placed first in the non-profit category, which includes more than 180 participants.