

FISCAL YEAR 2005 SECRETARY OF DEFENSE
US ARMY ENVIRONMENTAL AWARDS NOMINATION



FORT CAMPBELL, KY

ENVIRONMENTAL QUALITY



SUSTAINING
THE ENVIRONMENT
FOR A SECURE FUTURE

INTRODUCTION

Fort Campbell is a premier training and power projection platform of the Department of Defense (DoD). It exists to support readiness and mission execution of its expeditionary forces, including the 101st Airborne Division, the 5th Special Forces Group, the 160th Special Operations Aviation Regiment and the 86th Combat Support Hospital. Ready troops from Fort Campbell deploy to every theatre of combat in the world.

The 105,068 acres that make up Fort Campbell support a military population of almost 25,000; a dependent population of over 57,973; and more than 4,300 civilian employees. Fort Campbell has the seventh largest military population in the DoD. Services provided by the installation include more than 4,100 family housing units; social, religious and recreational facilities; a large post exchange/commissary complex; seven dependent schools; and a modern hospital.

Fort Campbell lies on the Kentucky-Tennessee border between Hopkinsville, Ky., and Clarksville, Tenn. Residents at the fort share in the heritage of two states rich in history and natural resources. They also share in the challenges inherent in the growth of communities surrounding the installation. Fort Campbell is valued as an important part of the economic development surrounding Clarksville and Hopkinsville, and as a member of their communities.



Educational Tours: Soldiers tour the Pollution Prevention Operation Center (PPOC) after receiving EMS training. The PPOC conducts 20 two-hour facility tours for units, commanders, students and civilians every year. Twelve environmental programs are featured within the tour emphasizing waste minimization through proper management and affirmative procurement.

BACKGROUND

Fort Campbell's environmental program focuses on 11 priority environmental aspects. The Public Works Environmental Division is organized, focused and resourced to support the installation environmental policy, objectives and targets related to these aspects. Each branch – Compliance, Pollution Prevention (P2) and Conservation – is staffed by subject matter experts who serve as program managers in various media areas. Total staffing includes 26 environmental professionals plus approximately 80 contractor support staff. Individual branch team efforts are integrated through environmental management plans aligned to the installation's environmental sustainability goals.

The key to Fort Campbell's environmental management approach is the Environmental Management System (EMS), which has been under development since 2003 and was instituted in 2004. Senior management championing

and program participation have ensured an EMS for Fort Campbell that conforms fully to DoD policy and guidance, and a culture that embraces EMS implementation. As of FY 2005, civilian personnel in all eight directorates and all incoming military personnel receive environmental awareness training.

Development of the EMS at Fort Campbell was an effort that extended to the installation's total community. In September 2003 Fort Campbell hosted a goal-setting sustainability workshop that was attended by over 200 stakeholders from local, state and federal agencies to focus on infrastructure, procurement, regional development, transportation and training support. Facilitated group sessions at the workshop resulted in

Prioritized Environmental Aspects

- Water Discharge and Use
- Air Emissions
- Encroachment
- Wildlife Habitat Alteration
- Solid Waste Generation
- Cultural Resources Alteration
- Land Damage and Loss
- Energy Use
- Haz. Waste Generation
- Materials Use
- Noise Generation

development of nine 25-year goals, 18 near-term objectives and 114 separate actions to ensure sustainable operations. These goals, objectives and actions became parts of Fort Campbell's strategic and business plans. In this action, Fort Campbell led the Army in integrating sustainability into strategic planning. Recognizing the value of this approach, in FY 2005 the Army revised its installation strategic planning guidance to include environmental sustainability principles.

PROGRAM SUMMARY

Fort Campbell has an award-winning environmental program geared to meeting the installation's environmental challenges in a way that supports Soldier readiness. Highlights of the FY 2005 environmental program were EMS implementation, hazardous materials management, air emissions reduction, recycling and National Environmental Policy Act (NEPA) and community outreach. The following successes were realized:

- EMS milestones numbers four and five were met in FY 2005;
- Hazardous materials (HAZMAT) management resulted in a 25 percent increase in combat readiness;
- Volatile organic compound (VOC) emissions were reduced by 75 percent; hazardous air pollutant (HAP) emissions were reduced by 95 percent;
- The PPOC reduced hazardous waste disposal by 84.6 percent, realizing a 90.1 percent disposal cost reduction;
- Deconstruction on certain buildings reached a 95 percent salvage rate;
- The Range Division used Fort Campbell's NEPA Web site to choose physical training routes; and
- The Earth Day program celebrated its 35th year of community outreach.

Year	Award
2005	White House Closing the Circle Award, Recycling Military (Honorable Mention)
2005	IPM Institute of North America, Star Certification
2004	Secretary of the Army Environmental Award for Pollution Prevention, Non-industrial Installation
2004	Governor's Award for Excellence in Hazardous Waste Management, State of Tennessee
2004	Governor's Award for Excellence in Local Government Stewardship, State of Tennessee

These successes represent what is unique about Fort Campbell's environmental program, namely that it is well established, encompassing, technically meritorious, well managed and cost effective. In all cases Fort Campbell's environmental program initiatives meet statutory and regulatory requirements, and in many cases they exceed them.

Document	Status
Installation Natural Resources Management Plan	Currently being revised
P2 Plan	May 04
Asbestos Plan	Aug 05
Stormwater Pollution Prevention Plan	Sep 05
Underground Storage Tank Management Plan	Currently being drafted
Restricted Management Plan	Nov 05
Ozone Depleting Substance Plan	Mar 01

ACCOMPLISHMENTS

EMS Implementation

With the groundwork laid in FY 2003 and FY 2004, Fort Campbell's EMS, called the Sustainable Installation Management System (SIMS), was implemented in FY 2005 when it met several foundational objectives (see figure 3). The garrison commander appointed himself as the EMS director and appointed an action officer to carry out the EMS implementation and oversee the day-to-day activities. He also created the EMS cross-functional team that represents the installation's directorates and hospital (tenant). Lessons learned were gathered from industry and used to meet a requirement of the implementation plan to identify, develop and publish eight procedures needed to execute the SIMS, including Document Control, Environmental Training and Corrective and Preventive Actions.

Objective	Completed
1. Initial Policy Statement	Sep 03
2. Self Assessment/Gap Audit	Feb 04
3. Implementation Plan	Sep 05
4. Environmental Aspects List	Mar 05
5. Awareness Training	Mar 05
6. Management Review	Oct 05

Fort Campbell faced a significant challenge in meeting EMS milestone number five – to provide

environmental awareness training for all civilian employees and military personnel. In meeting this challenge, Fort Campbell's in-house staff developed an awareness training video based on lessons learned from industry. The seven-minute video was aimed at the maximum attention span of the average audience, and included key messages and images of the relationship of EMS to sustainability and mission accomplishment. The video was paired with other annual mandatory training for civilian staff and is shown to all incoming military personnel during in-processing. The video received accolades from the viewers and was one of three EMS "How To" videos recommended as models by the DoD.

Auditor training was also conducted, and the EMS Team conducted its first internal audit in FY 2005. The team found 100 percent conformance in several areas of the ISO 14001 standard (risk management, policy and monitoring and measuring) with an overall conformance of 83 percent. Expansion of operational planning in the directorates, begun in FY 2005 after the audit, will boost the overall conformance score significantly, putting Fort Campbell well ahead of the curve on the DoD requirement of full conformance with the ISO 14001 standard by 2009.

"Fort Campbell has implemented one of the most progressive environmental management systems in the United States military and demonstrated an exemplary commitment to environmental improvements and sustainability."

- Gary Sondermeyer, Chief of Staff
State of New Jersey Department of
Environmental Protection

Operational Planning and Control

Operational planning began in August 2005 – eight months ahead of schedule – based on the installation's list of significant environmental aspects. This process requires the identification of all activities that the garrison performs and an evaluation of each activity to determine if it can create a significant environmental impact. For activities with controllable significant environmental impacts, objectives and targets are established to

either meet environmental policy requirements or installation strategic goals. This process identified over 200 activities. Evaluation for significance was based on frequency of occurrence, mission impact, environmental impact, regulation and public concern. Findings were documented in the directorate business plans for 2006 with assigned targets and objectives for those activities with significant impacts. This feature of the EMS focuses resources and efforts on those activities that are most likely to impact missions, or cause environmental damage or compliance problems. Responsibility for environmental performance of the activity remains properly with the process owner in the directorate. Management review at the directorate provides close scrutiny of progress on targets and objectives. Overall environmental awareness has been increased by involving personnel directly in activities.

Similar strategic goals and objectives set for FY 2005, including EMS implementation progress, were measured by three installation-level Quality Management Boards (QMBs) consisting of installation mid-level managers. The Infrastructure QMB determined that EMS implementation fully met all metrics in FY 2005 by reaching Army EMS milestones four and five (aspects analysis, EMS training). Other sustainability objectives that achieved FY 2005 metrics included reducing solid waste, establishing transportation partnerships with Tennessee and Kentucky, implementing green building designs, updating a joint land use study to address encroachment, reclaiming and reducing acreage of an artillery impact area, maintaining access roads to training areas and initiating actions to obtain training maneuver area.

Hazardous Materials Management

The Fort Campbell Pollution Prevention Operation Center (PPOC) provides centralized management of HAZMAT to 234 units and activities both for day-to-day and deployment operations. The daily HAZMAT delivery service restocks and inspects each of the over 553 hazardous material lockers on the installation. Instead of large quantities, custom hazardous material stock levels for each location are created based on strong relationships between PPOC personnel and unit commanders. This coordination ensures that adequate but

minimal HAZMAT is available to the Soldier at all times. In FY 2005, the PPOC ordered, managed and packaged 1,100 different hazardous products required for the mass deployment of over 20,000 personnel. Commanders reported a 25 percent increase in combat readiness as a result of the contingency operations program. After deployment, PPOC service specialists closed 553 unit hazardous material storage lockers, waste lockers and other areas of environmental concern and managed these materials in the centralized facility.



The PPOC packaged 1,100 different hazardous materials required for mass deployment of over 20,000 personnel.

Air Emissions Reduction

Fort Campbell’s largest aerospace spray booth transitioned in FY 2005 from using a two-part chemical agent resistant coating (CARC) to using water reducible chemical agent resistant coating (WR-CARC). This transition helped to reduce VOC emissions by 75 percent and HAP emissions by 95 percent for this source. Reductions were so significant that a new spray booth that will be completed in FY 2006 will also use the WR-CARC technology. Fort Campbell is working with the State of Kentucky on the draft Title V Operating Permit, and the transition to WR-CARC significantly supports compliance with air emissions regulations.

Robust Recycling

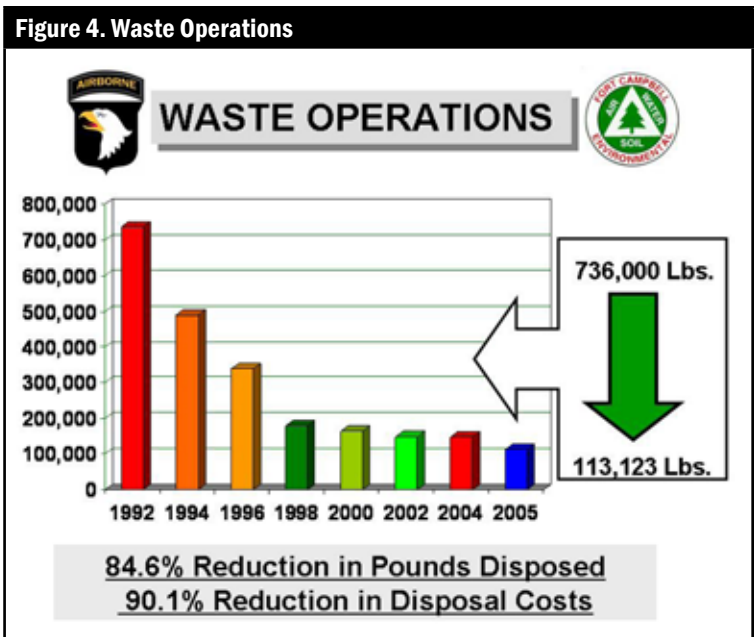
Significant savings were realized in Fort Campbell’s recycling program in FY 2005. Through the PPOC:

- Over 27,700 gallons of antifreeze were recycled, providing a total program cost avoidance of \$207,750;

- 45,830 gallons of solvent were recycled, providing a 96 percent reduction in hazardous waste disposal since 1994;
- The program’s operating costs have decreased from \$436,000 to \$200,000;
- Battery testing initiatives resulted in a 55 percent reissue rate, providing a \$1.5 million procurement cost avoidance and a \$44,640 disposal cost avoidance;
- 292,918 gallons of used oil and fuel were recycled, generating over \$49,878 for morale, welfare and recreation (MWR) programs;
- 263,565 pounds of lead acid batteries were recycled, generating \$10,286 for MWR programs;
- The PPOC achieved an 84.6 percent reduction in pounds disposed, resulting in 90.1 percent disposal cost reduction since 1992; and
- Concrete grinding of demolition landfill provided a 34,048 ton waste diversion and a \$1,061,675 cost savings.

One-Stop NEPA Resource

The Fort Campbell NEPA Process Action Team, created in FY 2005, developed a Web site on Army Knowledge Online (AKO) for environmental project managers. The site contains information about cultural and natural resource issues, erosion control measures, etc. and enables project managers to make informed decisions about their approach prior to initiation. The Range Division used the NEPA site in FY 2005 to choose the physical training route that had the least impact to the environment. The



AKO Web site also increases the efficiency of the military construction project process by providing any environmental concerns or issues to the Master Planning Branch in a timely manner. In addition, the site allows for integration of project information within the Environmental Division.

Community Relations

Community outreach has long been an important part of the installation’s environmental education program. Environmental education at Fort Campbell has a long history. The Earth Day program established in 1970 enjoys an annual participation exceeding 1,000 students. In FY 2005 Fort Campbell celebrated the 35th anniversary of Army Earth Day with more than 40 booths of environmental information and activities for more than 1,300 attendees, including students, faculty, Soldiers and family members. Participants from over 30 local, state and surrounding community organizations, including area museums, state and community parks had booths at the Earth Day fair. The program was expanded in FY 2005 to include an Earth Day, Every Day environmental incentive program, where elementary and middle schools on post earn points for environmental projects they undertake throughout the year. The school with the highest score receives a trophy on Earth Day.

Fort Campbell’s outreach program includes P2 mascots. Fanny, Freckles, Dee Dee and Ducky teach P2 lessons to pre-school, elementary and middle school students with notable sightings at the Wenk Magic of Recycling Show (2,995 in attendance), the

Extravaganza of Extreme Science Experiments (600 in attendance) and regular performances at the Fort Campbell library where they read stories with environmental messages.

Environmental education at Fort Campbell reaches many children, but it also benefits adults. In FY 2005 Fort Campbell also provided 135 environmental education classes and workshops to Soldiers and civilians.

Figure 5. Environmental Classes and Workshops

Class	Number of Classes	Hours Per Class	Students Taught in FY 2005
Environmental Quality Officer (EQO) Course	9	40	300
Fuel Handlers Course	3	1	175
On-site training	10	2	750
Commander and First Sergeants Course	4	0.5	175
Asbestos and Lead-based Paint Awareness	4	3	125
PPOC Tours	21	2	250
Archaeological Resources	1	24	35
Stormwater Erosion and Sediment Control	1	8	150
Conservation	1	8	150
EQO Meeting	6	2	350
EQO School System Meeting	6	1	50
Rear Detachment Cmdrs Course	4	1	300
Strategic Deployability School	12	1	250

CONCLUSION

Fort Campbell is on the forefront of integrating the EMS into an already well-established and robust environmental program. Every year Fort Campbell realizes successes that have received recognition from military and civilian organizations. FY 2005 was especially productive for Fort Campbell’s environmental program, evidenced by successful implementation of the EMS, mission support through efficient HAZMAT management, substantial savings and avoidances in pollution prevention measures, extensive training and education initiatives and more. Fort Campbell personnel are proud of the role they play in the nation’s defense.



Fanny and Freckles teach stormwater, pollution prevention and recycling lessons to kids.

On the cover: Army Capt. Alfonso Prieto from the Military Transition Team, 1st Battalion, 327th Infantry, 101st Airborne, Fort Campbell, Ky., sits in the gun turret of a tactical vehicle waiting to convoy to an Iraqi military base in Kirkuk, Iraq.