

Fiscal Year 2004 Secretary of Defense Environmental Awards Nomination

POLLUTION PREVENTION (INSTALLATION)

FORT CAMPBELL, KY



Sustain the Mission. Secure the Future.



INTRODUCTION

Fort Campbell is one of the Department of Defense's (DoD) premier training and power projection platforms, capable of deploying ready troops to any theatre of combat in the world. Postured on the Tennessee—Kentucky border, Fort Campbell boasts the third largest military population in the US Army, and seventh within DoD and is home to the 101st Airborne Division. With over 93,000 acres of training and firing ranges it is easy to imagine the impressive mission this installation fulfills. However, the training and training support Fort Campbell staff provides to the 101st comes with vast potential impacts to the environment, which is why Fort Campbell compliments its heavy training

Fort Campbell Quick Facts	
Total acres	105,068
Military population	24,916
Dependant population (on post)	14,588
Dependant population (off post)	31,589
Civilian employees	4,317

needs with a comprehensive Pollution Prevention (P2) Program. The P2 Program's overall mission is to further mitigate environmental challenges and impacts associated with training, and prepare the 101st Airborne division for its role in the Global War on Terror.

BACKGROUND

Units located throughout Fort Campbell use and dispose of hazardous materials on a daily basis, potentially increasing compliance costs and posing risks to the environment. As a result, P2 staff must positively impact all of the activities shared between the 101st and other combat ready units divided among Infantry, Aviation, Field Artillery and Defense Artillery.

To meet this challenge, Fort Campbell took a collaborative approach toward Environmental Management System (EMS) implementation and hosted a Training and Sustainability Challenges Development Workshop in February 2003. The workshop, attended by the Garrison Commander, environmental staff, and the Army Deputy Chief



▲ Based out of Fort Campbell, KY, these Soldiers of the 101st Airborne Division rely on Pollution Prevention Operations Center hazardous material contingency packages to support them while fighting the Global War on Terror.

of Staff/G3 hashed out mission core competencies and generated Installation Sustainability Program (ISP) topic areas and sustainability challenge statements. Directorates came together from all over Fort Campbell to analyze mission activities and determine significant aspects that focus ISP and EMS support and future development. Resulting actions are fully integrated into the ISP, the Strategic Readiness System, P2 practices and initiatives and Fort Campbell's EMS, which is now 60 percent conformant with ISO 14001 standards.

Accomplishing EMS goals require a multifaceted management approach. At Fort Campbell an innovative solid waste and recycling program coupled with an award winning Pollution Prevention Operation Center (PPOC) creates unprecedented results. Both programs, with separate objectives that support the installation's overall P2 goals, are overseen by Fort Campbell's Environmental Division and play integral roles in minimizing waste, ensuring environmental compliance and maintaining combat effectiveness, saving valuable installation dollars.

The Army currently owns 100 million square feet of unneeded building space on its installations, and is projected to spend \$130 million per year over the next five years eliminating much of this excess infrastructure. Fort Campbell's Solid Waste/Recycling Program is positioned to operate and maintain Fort Campbell's World War II



▲ C&D waste makes up 80 percent of Fort Campbell's total solid waste stream.

Deconstruction Program, which constitutes nearly 80 percent of the installation's construction and demolition (C&D) waste. The Solid Waste/Recycling Program office, staffed by two engineers and an environmental specialist, has made Fort Campbell a leader in waste reduction. It helps eliminate C&D waste under budget while making room on the installation for mission operations, modularity initiatives and frees up valuable resources for modernization of the Army.

The PPOC consists of several programs, each having an integral role in minimizing waste, ensuring environmental compliance, maintaining combat effectiveness and saving valuable installation dollars. Thirty-five people staff the PPOC across seven facility buildings, nine hazardous waste buildings and 44 hazardous material (HAZMAT) portable storage locker buildings. PPOC programs ensure proper management for the requisition, receipt, distribution and storage of all HAZMAT, hazardous waste and recyclable fuels and oils on Fort Campbell. PPOC personnel enthusiastically integrate sustainability principals with installation strategic planning and utilize Fort Campbell's EMS to connect various mission support activities that reduce pollution.

PROGRAM SUMMARY

Fort Campbell sees its EMS as an opportunity to improve an already distinguished P2 Program. Upon receipt of EMS guidance and direction, the Fort Campbell Environmental Division immediately set ambitious objectives for all programs to meet,



▲ As part of PPOC waste management efforts, hazardous waste personnel pick up waste from generator locations and transport to the 90-day accumulation point.

and helped each of Fort Campbell's directorates construct an aggressive EMS implementation plan that to date has met or exceeded all Army metrics for EMS implementation. Fort Campbell's rigorous sustainability objectives are integrated with P2 activities and enable the installation to make vast strides in its EMS goals and implementation. Some of these objectives and achievements include:

Objective: Infrastructure Sustainability by 2012

Achievements: Implemented a Sustainable Facilities and Operation Program to consider renewable energy alternatives; to conduct outreach, education and technology transfer; and to improve post-wide energy and resources conservation program for efficiency and force protection. For example, Fort Campbell identified point source activities such as tactical vehicle use of wash racks that impact water quality, and is implementing efficient water use practices that will dramatically reduce reliance on water by 2010.

Objective: Efficient Procurement

Achievements: Implemented C&D Waste Initiative that will eliminate more than 90 percent of all C&D by 2012; and the Reduce Industrial Waste Initiative that through source reduction, reuse and recycling, will eliminate 40 percent of Fort Campbell's industrial waste by 2012. This initiative has already saved Fort Campbell \$160,000 in procurement of raw materials for road construction.

Objective: Sustainability Awareness

Achievements: Identified existing training to integrate sustainability awareness, such as: Environmental Quality Officer 40-hour course, Facility Manager Training, strategic planning, professional development, Soldier In Processing and environmental outreach programs.

Each of these initiatives will result in 100 percent installation-wide sustainability by the year 2028.

ACCOMPLISHMENTS

Fort Campbell Soldiers present the best testimony to P2 accomplishments by reporting increases in unit readiness of 25-30 percent, and can tout as much as 69 percent in cost savings to their units. The installation's extensive P2 initiatives are recognized by regulators and state officials throughout Tennessee as being proactive and delivering the type of results that keep the installation running efficiently and on target to complete its mission.

The state of Tennessee honored Fort Campbell with the Governor's Award for Excellence in Local Government Stewardship in 2004; and the Governor's Award for Excellence in Hazardous Waste Management in both 2003 and 2004. Fort Campbell was awarded the White House Closing the Circle Award for Model Facility; was one of the 50 finalists for the Harvard Innovation Award for their PPOC and received honorable mention in the White House Closing the Circle Award for Solid Waste and Recycling. These awards only further demonstrate the impact and success of Fort Campbell's P2 program.

Improving Material Management

Fort Campbell personnel have identified many opportunities to improve waste management while enhancing readiness. PPOC programs are cornerstones of this effort by alleviating and



▲ PPOC Personnel provide safety, P2 and storage information for all HAZMAT raising awareness and ensuring compliance.

relieving HAZMAT management from the unit and the Soldier. This was most recently evident when the PPOC efficiently packaged 141 unit contingency packages and handled 2,635 walk-in orders in support of mass emergency deployment of over 20,000 Campbell personnel. PPOC efficiency ensured no unit experienced delays due to packaging or material availability, in contrast to units across the country stopped at port due to improper packaging. PPOC staff followed up this comprehensive HAZMAT management by closing storage lockers and waste lockers of deployed units. These materials were brought to the centralized facility to be used by remaining reserve units on post.



▲ Soldiers retrieve HAZMAT from their PPOC managed HAZMAT storage lockers.

The mission readiness, cost savings and P2 accomplishments of the PPOC illustrate the important role P2 programs play at Fort Campbell. All PPOC programs have broad reaching impacts to mission sustainability and cost avoidance. These impacts are described in Figure 1. For example, the parts washers and weapons cleaner program saves Soldiers countless hours of hand scrubbing parts/weapons, and the Hazardous Waste Management Program provides single point product screening and tracking to minimize material disposal and costs by over 80 percent.

Figure 1. Pollution Prevention Operations Center Programs	
Program	Description
Shelf Life Management	Inspects for deterioration of specific materials and extends those materials that would otherwise be disposed as waste.
Battery Management	Provides single point control and accountability for requisition, receipt, distribution, storage, testing and disposal of batteries.
Freon Reclamation	Recovers refrigerants, recycles on-site, sends to a US Environmental Protection Agency approved company for Quality Assurance tests, and reissues as appropriate to units, cost free.
Parts Washers/ Weapons Cleaners	Recycles 20,000 gallons of parts washer solvent on-site annually.
Used Oil Management	Collects, assesses, stores and recycles used petroleum, oils and lubricants (POL) generated at unit level or maintenance level.
Spill Response Materials	Assists units in managing environmental impacts during deployments and while performing maintenance operations. Uses PPOC designed spill kits made on-site and specially designed for the Soldier's actual needs in the field.
Hazardous Waste Management	Operates a "You Call We Haul" service to maximize customer service. Customers can schedule pick-up of waste and within 72 hours the PPOC will go to the unit location and remove material.
Contingency Support Operations	Maintains a unit specific contingency stock developed by the unit commander to support specific needs. Pulls from unit specific inventories, inspects for serviceability, assembles and then issues. Packages all HAZMAT in Performance Oriented Packaging as required by Department of Transportation and United Nations regulations.

Saving Through Recycling and Innovative Practices

Fort Campbell’s robust recycling program has demonstrated results and cost savings that far exceed other installation programs. Overall, the Fort Campbell P2 Program saved the government over \$1.5 million in FY 2003 and reduced the quantity of waste by more than 80 percent over the 1992 baseline.

Figure 2. Reductions Achieved Through Proper Environmental Management

<i>Initiative</i>	<i>Cost Savings</i>
Building deconstruction/ concrete grinding	\$800,000
PPOC series of programs	\$760,000

Promoting Pollution Prevention Involvement

Fort Campbell personnel realize successful P2 and sustainability programs are the result of a team effort and that education, outreach and partnerships are critical to success. “It takes a village,” conceptualizes every aspect of Fort Campbell’s program initiatives. Not only are stakeholders targeted with P2 initiatives through mass media publications and cable television programming, but, P2 Program staff also develop training focusing on different topics, some of which are offered through online learning centers targeted to Soldiers, the local community and personnel at other installations.

Additionally, in September 2004, Fort Campbell hosted a three-day goal-setting sustainability workshop and invited local political leaders, state agencies, other federal agencies, other installation

staffs and its own units and tenants to attend. Two hundred twenty-five participants attended in the first day alone. By the end of the workshop cross-functional teams focusing on infrastructure, procurement, regional development, transportation and training support developed nine 25-year goals, 18 near-term objectives and 114 separate actions for the installation to meet its 25-year goals. Fort Campbell personnel included all objectives and action items in their installation strategic plan.

“Fort Campbell very effectively integrates suitable principles into military responses, as well as environmental stewardship... it sets a model for other federal, state and local facilities to emulate.”

-Juan Lopez, senior program manager at the Office of the Federal Environmental Executive

SUMMARY

Fort Campbell’s P2 efforts result in installation-wide improvements in materials management, increased mission readiness, improved environmental compliance and cost savings. Furthermore, P2 and the entire environmental staff tie together the installation’s EMS, sustainability plan and strategic plan into every practice and initiative, ensuring effective management and a more sustainable fighting force. The fruit of their efforts is knowledge and reassurance that the Soldiers and units they support are combat ready and highly deployable.

“I believe Fort Campbell has definitely succeeded in establishing an impressive blueprint and operative system for strategic Sustainable Installation Management within DoD, and a model to the rest of the federal government. It is apparent that installation-wide environmental awareness and cross-functional management cooperation has resulted in an organization designed for sustainability.”

- TJ Granito, EMS/P2 program manager, US Coast Guard