



#### Introduction:

Today, as in the past, Marine Corps Base Camp Lejeune's (MCB CAMLEJ) mission remains the same — <u>to maintain combat-ready units for expeditionary deployment.</u>

The GF department at MCB CAMLEJ is challenged with providing the support structure, utilities, roads, and services to equip our Marines in modern facilities and allow them to train in an environment that meets their needs today and tomorrow. MCB CAMLEJ's management systems focus on the essential triple-bottom line to ensure a successful and sustainable installation: Mission, Community, Environment.

The Mission: To support the warfighters for the variety of combat and humanitarian missions they may experience abroad, MCB CAMLEJ takes advantage of 156,000 acres, 11 miles of beach capable of supporting amphibious operations, 34 gun positions, 50 tactical landing zones, three state-of-the-art training facilities for Military Operations in Urban Terrain and 80 live fire ranges to include the Greater Sandy Run Training Area.

The Community: The base and surrounding community is home to an active duty, dependent, retiree and civilian employee population of approximately 170,000 people. This amount includes over 63,000 active duty and 11,000 civilian employees.

The Environment: The protection and enhancement of the natural environment is a key asset in the training and support mission of Marine Corps Installations East-Marine Corps Base Camp Lejeune (MCIEAST-MCB CAMLEJ). MCB CAMLEJ is committed to:

- Protecting human health;
- Conservation of natural and cultural resources:
- Compliance with local, state and federal regulatory requirements;
- Sustainment of the Environmental Management System (EMS) which promotes mission readiness while maintaining efficient resource use; and
- Reaching goals mandated by Executive Orders 13514 and 13423.

The Resource Conservation and Recovery Section (RCRS) is a team of civilians and enlisted Marines who manage, implement and oversee a varied set of compliance focused business practices that control the usage and ultimate disposal of hazardous materials and hazardous waste for all base organizations, tenant commands and contractors occupying MCB CAMLEJ. The MCB CAMLEJ RCRS is nominated for the Secretary defense sustainability team award for their significant contributions to the Mission, Community, and Environment for FY 2013-2014.









#### **Background:**

The largest Marine Corps base on the East Coast, MCB CAMLEJ plays an important role in the Marine Corps' expeditionary abilities. The Base actively maintains combat-ready units for deployment, including the II Marine Expeditionary Force (MEF), a Marine Air Ground Task Force of 47,000 Marines and Sailors. Several training schools are housed at MCB CAMLEJ, including Camp Geiger, the Marine Corps School of Infantry, East; Camp Johnson, the Marine Corps Combat Service Support School; and the Marine Corps Combat Engineering School. MCB CAMLEJ's three standing Marine Expeditionary Units (MEUs) maintain a high state of combat readiness as an air-ground striking force. The Base provides housing, training facilities, and logistical services for active and reserve MEF commands, and supports mobilization and deployment during exercises and contingencies. Additionally, the Naval Hospital provides primary medical care to service members and their families stationed at MCB CAMLEJ and Marine Corps Air Station (MCAS) New River.

MCB CAMLEJ is committed to integrating sustainable Hazardous Material (HM)/Hazardous Waste (HW) management practices in support of the Marine Corps' mission and continues to explore and implement opportunities for efficient resource use. The RCRS, Environmental Compliance Branch (ECB), is part of the Environmental Management Division (EMD) and consists of four full time Environmental Protection Specialists, five assistants and contractor support.

In support of the mission, responsibilities of the RCRS include:

- Serving as leader of the EMS HM/HW Working Group;
- Monitoring HM/HW collection, treatment, and disposal activities to ensure that program
  operations are environmentally sound and conducted in compliance with all relevant regulations and Orders, and assist with environmental compliance evaluations;
- Preparing and submitting budget projections for disposal costs while maintaining accurate records of HM/HW management activities;
- Participating in the development of installation and site-specific HM/HW spill contingency plans and associated HM/HW spill prevention, control, clean-up, and disposal activities;
- Serving as Head, Facility Response Team (FRT) for waterborne releases.

#### **Summary of Accomplishments:**

During the achievement period, the MCB CAMLEJ RCRS repeatedly exceeded expectations by initiating sustainable practices and the efficient use of resources. The RCRS has fully embraced their title to "Conserve Resources". Where the primary mission of MCB CAMLEJ is to train and prepare troops for operational readiness and expeditionary deployment, the RCRS









has proven that time is as critical a resource as money or fuel.

The RCRS has demonstrated the ability to minimize the collateral duties of environmental management, ease the burden of environmental compliance, and return valuable time back to the MCB CAMLEJ's mission of preparing and training our Marines and Sailors. Focusing on the core sustainability principles during this achievement period, the RCRS has supported operational readiness by significant contributions to mission, community, and environment.

Programs such as Curbside HM Pickup, has saved tens of thousands of manhours during the

achievement period. The time required by Marines and Sailors to collect and manage excess and empty HM, was instead used to enhance mission readiness by allowing these troops to focus on training and mission essential tasks. Reuse and recycling efforts such as operation of the Hazardous Material Reissue Facility (HMRF) and recycling of used oil and fuel have saved hundreds of thousands of dollars in procurement of new HM and disposal of HW. The expansion of the Hazardous Material Consolidation Program (HCP) has increased cradle-to-grave visibility of HM, and has also supported the Base and Department of Defense (DOD) Strategic Sustainability Performance Plan (SSPP). Lastly, pro-



Staff from the MCB CAMLEJ RCRS pick up HM and HW from units aboard the Base.

grams such as the MCTFER (Military-Civilian Task Force for Emergency Response) have demonstrated RCRS's desire to "go beyond the fenceline" to ensure the partnership between community and military continue to foster a successful mission environment.

#### **Curbside Pick-up Services**

RCRS implemented weekly or as needed curbside HM pickup for military, civilians, tenant commands and contractors responsible to MCB CAMLEJ. The service provides an opportunity to turn in unwanted, excess and used hazardous materials from their work centers without the environmental liability of managing a hazardous waste site for each waste stream. 108 units, tenants and contractors across MCB CAMLEJ, Courthouse Bay, Stone Bay, Camp Johnson, Camp Davis, Camp Geiger, Oak Grove and MCAS New River participate in this provided service.



Operation of the Curbside HM Pickup program resulted in 30,000 manhours being returned to operational units during FY2013-2014.









During the award period the total manhours saved by operating forces is calculated at 30,000 man hours. This is a substantial contribution to the enhancement of military readiness by returning personnel to their primary mission. In this case, the implementation of the Curbside program fostered involvement and buy-in from the operational units and command structure.

Material received during this service deemed viable by the RCRS are made available via the HMRF for reissue, which assists the base in its waste minimization efforts, saves money, identifies additional pollution prevention opportunities, and improves outreach efforts. Materials not redistributed are characterized for waste disposal and consolidated at a centralized < 90-day HW site. By implementing innovative HM/HW business practices and minimization efforts, RCRS now manages only a single <90-day HW site, and has been able to reduce the number of Satellite Accumulation Areas (SAAs) across the Base to less than 10. Eliminating unnecessary SAAs greatly reduced the environmental liability and regulatory burden on both RCRS employees and operational units. The Curbside Pickup program will continue to expand to additional units and will be used to augment other environmental programs and provide increased outreach opportunities.

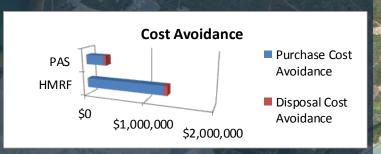
#### **Pollution Prevention/HMRF**

The HMRF serves as an outlet for unused or excess HM promoting attainment of SSPP goals in two ways:

- First, it provides an alternative to HM disposal, thus reducing quantities of solid waste (SW) and HW generated.
- Second, it reduces HM circulation by providing viable products ready for use, eliminating the need to purchase additional, new quantities of the same product.

The HMRF provides viable HM items to approved customers at no purchase cost.

Though previously closed due to lack of manpower, the facility was re-opened in March 2012 and is currently staffed by RCRS personnel. The HMRF is operated as a P2 initiative in efforts to divert useable HM from the HW stream. The HMRF has become the first stop for many work centers on base in need of



During the past two years, the HMRF has saved the government \$1,335,158 in HM and HW avoidance.









HM. During the award period, the HMRF issued 15,826 hazardous material (HM) items valued at \$1,269,562.

In addition to the HMRF, RCRS has implemented other significant measures to reuse and recycle materials. While the tangible benefit of these programs is the waste avoided and the associated disposal costs, the programs also yield substantial, yet unquantifiable benefits. Eve-

ry ounce of excess, waste, or mismanaged material that is removed from units and removed from MCB CAMLEJ creates safer work areas and minimized risk to the environment.

The Pollution Abatement and Recovery Section (PAS) of the RCRS recovers, collects and recycles off-specification fuel and used oil which have both avoided waste disposal costs and yielded a positive revenue return. Unused fuel from training operations is another issue being addressed by RCRS; presently the unused fuel is sold for \$1.43 gallon as MCB CAMLEJ has no facilities to store the fuel for reuse on site. RCRS has coordinated with the MCBCL fuel vendor to install or use an existing tank so



During the award period, MCB Camp Lejeune recycled 63,096 gallons of used fuel and 146,317 gallons of used oil.

that unused field training fuel can be stored on-site for reissue, eliminating the off-site transfer of the material. During the award period, MCB CAMLEJ recovered 63,096 gallons of off-specification fuel. If it were to be disposed of as HW, it would cost the Base \$14,512 in disposal costs. Instead, the fuel was sold to a recovery company and \$90,227 were received by Defense Energy Support Center (DESC).

Similarly, 146,317 gallons of used oil were recovered and sold for \$1.43/gallon (thereby avoiding waste disposal costs of \$146,228 and gaining \$209,233 in Qualifying Recycling Program (QRP) funding. It's important to note that through these efforts by the RCRS, they have been able to not only effect savings within their own department, but have also helped mission-ready operational units to realize significant savings in the purchase of consumable HM.

#### Expansion of MCB CAMLEJ HCP HMMS

MCB CAMLEJ utilizes Hazardous Material Management System (HMMS) as the information technology (IT) solution tool to maintain a successful HCP by increasing visibility of HM usage and HW generation through "cradle-to-grave" management. There are currently 11 HCP Issue Points aboard the installation that utilize HMMS including the <90-day site. During the award period, RCRS implemented three new HCP Issue Points within the framework of CAMLEJ's









HCP. The main goal of the HCP is to minimize HM usage aboard the facility ultimately reducing HW generation. The HCP provides numerous benefits at MCB CAMLEJ including:

- Shelf-Life management.
- Providing cradle-to-grave tracking of HW.
- Providing a mechanism for monitoring HM via Authorized User Lists (AUL).
- Reducing manpower associated with preparing regulatory reports such as RCRA Biennial reports and HW Annual Data Call reports, Emergency Planning and Community Right-to-Know Act (EPCRA) Tier II and Form R reports, and Clean Air Act reports.
- Improves safety by facilitating Hazardous Communications (HAZCOM) program HMMS
  provides online access to Material Safety Data Sheets (MSDS) and Safety Data Sheets (SDS)
  for every materials that comes through HMMS.
- Evaluation of key SSPP metrics, such as Toxic Release Inventories (TRI) reduction targets

Proactive management of HM in the HCP and effective data management using HMMS yielded the following benefits in FY2013:

- MCB CAMLEJ manages Shelf-Life in HMMS by identifying products that will expire in supply, retail, and wholesale environments (HMMS Issue Points) by calendar year quarter. In Fiscal year 2013 (October 2012-August 2013) HMMS tracked and identified over 1,447 individual HM items that were extended, producing a purchase cost avoidance of \$96,070.12.
- In June 2013, RCRS identified non-movement history of HM items. As a result 2D Supply Battalion reduced their on-hand inventory by 54%, a \$240,000 value. Currently, RCRS is assisting with the development of AULs at all major tenant commands. It is expected that AULs will begin to drive on-hand stock levels once implemented.

Industrial activities at MCB CAMLEJ use a variety of materials containing toxic chemicals, resulting in both nonhazardous and HW generation. Thus, effective material management from "cradle-to-grave" also has an impact on total TRI reportable releases and attainment of DoD SSPP goals. In terms of HM and resultant HW management, MCB CAMLEJ has made measurable strides towards reducing HM accumulation, minimizing waste generation, and identifying alternative dispositions for wastes (i.e., reuse and recycling).

#### **Facilities Response Program (FRP)**

In addition to extensive HM/HW practices aboard MCB CAMLEJ, the RCRS manages the Facilities Response Program (FRP). The Facilities Response Team (FRT) protects over 34 miles of pristine North Carolina shoreline from the harmful effects of water borne petroleum contamination. The FRT maintains a constant state of readiness to respond to spills in or around MCB CAMLEJ's coastal and estuarine resources. RCRS personnel maintain a fleet of seven response boats with









varying capabilities including skimming and deploying booms, along with a vacuum truck, spill trailer, and various pre-staged booms for rapid deployment in sensitive areas or areas likely to encounter spills.

In a recent training exercise (May 2014), the MCB CAM-LEJ FRT was awarded a Certificate of Commendation for exceptional performance. The team was recognized by the Naval Facilities Engineering and Expeditionary Warfare Center, "The facility response team at MCB CAMLEJ is...one of the best FRTs I have had a chance to work with. Their execution, teamwork and attention to detail was outstanding."

The RCRS and the FRT also recognize the importance of outreach and partnerships with other local agencies to properly prepare for emergency events. The RCRS participates as a critical member of the Military-Civilian Task Force for Emergency Response (MCTFER), under the mutual leadership of Onslow County, MCB CAMLEJ



RCRS personnel set surface water POL boom during training exercise.

and the City of Jacksonville. The MCTFER was developed to execute inter-operations and mutual aid agreements for emergency response for the benefit of the citizens of local military and civilian communities. The MCTFER is a combined municipal and military installation emergency response that uses the combined resources for the common good of all.

The MCB CAMLEJ RCRS has always been a forerunner in the DoD sustainment arena by implementing resourceful business practices to continually improve their HCP and HM/HW management programs. During the award period the RCRS has continued to promote and sustain sound HM/HW business practices through the curbside HM pickup service, by alleviating environmental liability and returning productive manhours back to MCB CAMLEJ's primary mission. The permeation of the RCRS personnel at work centers during weekly curbside HM pickups promotes a better understanding and awareness of the HCP principles through improved HM management. The promotion and management of the HMRF supports the Marine Corps legacy of "doing more with less" by making valuable HM items readily available to support the mission, and simultaneously reducing costly HW disposal cost. In additional efforts to support the HCP the RCRS has continued to monitor and track the use and management of HM/HW through the HMMS IT solution, therefore enabling more efficient and accurate regulatory reporting methods. Acting as members of the FRT and the MCTFER the RCRS continues to encourage environmental stewardship and safeguards our distinct community. These programs are a testament to the RCRS's dedication to meet their daily responsibilities, while continuing to explore and implement opportunities for efficient resource use, while meeting mission needs.



