

# Secretary of Defense Environmental Awards FY 2012-2013

## Environmental Quality – Individual/Team



MARINE CORPS INSTALLATIONS EAST – MARINE CORPS BASE CAMP LEJEUNE  
JACKSONVILLE, NORTH CAROLINA

### BACKGROUND

Marine Corps Installations East – Marine Corps Base Camp Lejeune (MCIEAST – MCB CAMLEJ) maintains a Qualified Recycling Program (QRP) as a means of supporting sustainability programs that improve mission capability. The QRP helps prevent pollution and achieve source reduction in accordance with solid waste (SW) management requirements, including maintaining a cost-effective recycling program per Executive Order (EO) 13423 and achieving the SW diversion goals of EO 13514. The QRP strives to achieve the goals of these EOs by maximizing the amount of SW diverted from landfills, increasing recycling, supporting sustainable procurement policies, increasing public awareness and outreach related to waste minimization and recycling operations, complying with applicable laws and regulations, and maximizing proceeds that can be earned from the sale of recyclable commodities.

This program is managed by Alicia Filzen, QRP Manager within the Environmental Management Division (EMD) at MCIEAST – MCB CAMLEJ. The QRP has grown significantly over the past two fiscal years (FYs) due to community outreach initiatives. The QRP has generated \$2.7 million in revenue in 2013, which is an increase of 674 percent from \$348,867 in revenue in 2007. Meanwhile, the costs associated with landfilling SW have decreased 20.8 percent from \$1,913,763.89 in 2007 to \$1,515,962 in 2013 despite a 45.7 percent population increase. Most significantly, 57.6 percent of solid waste was diverted from landfills in 2013 thus meeting the goal of 50 percent diversion goal specified in EO 13514.

### QRP BY THE NUMBERS

- 674% increase in revenue from \$348,867 in 2007 to \$2.7 million in 2013.
- 20.8% decrease in landfilling costs from \$1,913,763.89 in 2007 to \$1,515,962 in 2013 despite a 45.7% population increase.
- 57.6% of solid waste diverted in 2013, up from 19.4% in 2007.

### POLICIES AND GOALS SUPPORTED BY OUTREACH EVENTS COORDINATED BY THE QRP MANAGER

- Executive Order 13423 – maintain a cost-effective recycling program; sustainable end-of-life management for electronics.
- Executive Order 13514 – divert 50% of solid waste by 2015 (QRP achieved 57.6% diversion rate in 2013); advance regional and local integrated planning.
- Environmental Management System – coordinate cross-function resources.
- Strategic Sustainability Performance Plan – conservation program management; management systems; solid waste management; water resources management.

### POSITION DESCRIPTION

The QRP Manager acts as the subject matter expert on recycling efforts at MCIEAST – MCB CAMLEJ by continually analyzing waste streams and using this information to develop and carry out plans to improve pollution prevention initiatives. A major component of these initiatives has involved QRP Manager oversight for the planning and implementation of an innovative outreach campaign. These outreach efforts support the MCIEAST – MCB CAMLEJ Environmental Management System (EMS) and the Strategic Sustainability Performance Plan (SSPP) by educating Marines, their families, and the local community on environmental challenges and by encouraging them to participate in innovative solutions.



## SUMMARY OF ACCOMPLISHMENTS

Part of MCIEAST – MCB CAMLEJ’s success has been recognizing the need to target the diverse members of the base community. Another element of success has been recognizing that simply distributing information is not enough. MCIEAST – MCB CAMLEJ’s approach has been to make the outreach and education efforts fun and interactive, which has increased overall participation and shown measurable outputs in complying with EO 13423 and EO 13514. Below is a summary of the activities MCIEAST – MCB CAMLEJ implements to reach Marines, their families, and the local community.

## EARTH WEEK ACTIVITIES

Earth Week activities represent a key outreach initiative for the EMD. Creative planning has resulted in the annual Earth Day Fair’s significant growth from involvement of approximately 400 students in 3rd through 6th grades in 2011 to over 1,000 students in 1st through 12th grades in 2013. During the 2013 Earth Day celebration, display booth content was alternated throughout the day to appropriately engage and educate students of all ages. MCIEAST – MCB CAMLEJ also used rotating display booth content to distribute information related to a variety of topics addressed in its EMS and SSPP.



Contest winners hold T-shirts with their designs during the 10th Annual Earth Day Fair and Art Contest at the Marston Pavilion aboard Marine Corps Base Camp Lejeune April 24. The contest received a total of 13 designs.

Students visiting the display booths were encouraged to question presenters and participate in activities through interactive trivia scavenger hunts. The EMD developed three separate scavenger hunts with questions targeted to specific age groups – elementary, middle, and high school students. Trivia questions for the scavenger hunts were related to MCIEAST – MCB CAMLEJ programs, the local ecosystem, stormwater, recycling, and energy consumption.

### QRP BY THE NUMBERS

- 150% increase in Earth Day participation of school-age kids from approximately 400 in 2011 to over 1,000 in 2013.
- Nearly 100 participants in trash removal event at local stream.
- Over 17,600 pounds of electronics collected in FY 12 and FY 13.

The QRP Manager coordinated with MCIEAST – MCB CAMLEJ middle and high schools to hold a student art contest for art that communicates the Earth Day theme of “Protecting our Resources, Preserving our Future.” The EMD displayed the finalists’ designs at the Earth Day Fair and held a ceremony where each finalist was presented a certificate and prize by Captain Craig Fulton, Director of Installations and Environment Department. The winning design from the middle and high school was printed on 200 t-shirts that were distributed during events throughout the year.

Other 2013 Earth Week activities included a clean-up of various recreational areas with local Cub Scouts and Boy Scouts, a “Splash for Trash” event for Marines and their families to collect trash from the installation’s French Creek, and a Household Electronics Recycling event.





The Cub Scout and Boy Scout clean-up events took place at three separate locations – Greenway Trail, Stone Street, and Northeast Creek Park. In total, 46 Scouts and 18 supervising adults participated in this event.

Volunteers who signed up for Splash for Trash were eligible to receive complimentary T-shirts featuring the designs of the student art contest winners. Nearly 100 service members and civilians participated in this event by walking, canoeing, and boating to reach and remove trash from French Creek and the surrounding terrestrial habitat. Trash collected during the event filled a truck bed and ranged in items from plastic cups to tires. This event coupled with the Cub Scouts and Boy Scouts event addressed water resource management and conservation program management goals presented in the MCIEAST – MCB CAMLEJ SSPP.

Volunteers collect enough debris from French Creek during the 2013 Splash for Trash Event to fill a truck bed.

Earth Week’s annual Household Electronics Recycling Event takes place at a central location and provides participants with a means of recycling items not collected on a regular basis that may otherwise end up in a landfill. Items eligible for turn-in included monitors, televisions, keyboards, printers, computer peripherals, consumer electronics, small household

appliances, circuit boards, integrated circuits (microchips), telephone equipment, facsimiles, switches, circuit breakers, voltage regulators, connectors, cables and wiring, cellular phones, and communications and networking equipment. In total, in 9,000 pounds of electronics were collected in FY12, and 8,600 pounds of electronics were collected in FY13. Outreach and promotion of these events supports electronics waste goals outlined in the MCIEAST – MCB CAMLEJ SSPP.



Students at the 2013 Earth Day Fair gather around booths and participate in activities on a variety of environmental topics.

### QUALIFIED RECYCLING PROGRAM EDUCATION

Promoting recycling increases the amount of recyclables collected, increases commodity proceeds, and reduces the cost of SW disposal. Continuous recycling education programs are especially important for the transient personnel and residents that exist at military installations.



Some outreach programs related to the QRP specifically target school-age children to become involved with recycling. These children in turn encourage their other family members to do so as well. The EMD has educated over 900 local students about the QRP and SW diversion via landfill tours. On these tours, EMD personnel demonstrate functions of the Base Landfill & Recycling Center (Base Landfill) so that the students have an opportunity to see SW management practices in action. The tour includes a visit to the composting center and wood lot, the material recovery facility (MRF), and the Base Landfill.

Another QRP outreach initiative for school-age children was implementing a recycling program at Department of Defense (DoD) schools, to include after-school programs. This 2013 recycling initiative added recycling containers to hallways and cafeterias, and the initiative proved successful enough to continue past the piloting stage. Items collected in this program include paper, plastic, and cardboard. Once these items are collected, recyclables are delivered to the Base Landfill for processing.



This poster promotes the new recycling initiative at DoD schools and clearly demonstrates the items collected by the program.

Other outreach programs have targeted military members and their families as well as civilian personnel. During an FY13 Barracks Pilot Project, Marines began collecting aluminum, paper, and plastic recyclables at the French Creek Barracks, which comprises 21 buildings. The purpose of the program is to test this practice for future deployment at all barracks in order to further increase overall SW diversion.

The program has placed 1,956 recycling containers in work spaces and in every service member’s room; seventy-five, 50-gallon collection containers in common areas; forty-two, 95-gallon containers throughout the outside areas; and twenty-one, 8-cubic yard dumpsters staged outside for recyclable consolidation prior to pick-up and transfer to the MRF. After the first eight months of implementation, the Barracks Pilot Project collected 23.8 tons of recyclables.

**QRP BY THE NUMBERS**

- 1,956 recycling containers in the Barracks Recycling Pilot Project collected 23.8 tons of recyclables in the first eight months of implementation.



Marines participate in new Barracks Recycling Pilot Project.

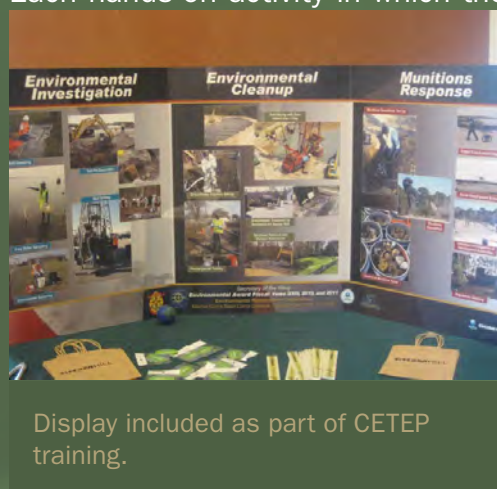


Another popular QRP outreach activity targets a specific recyclable category that is not collected on a regular basis—electronic waste. The annual Household Electronics Turn-in event during the 2012 America Recycles Day resulted in DoD civilians and Marines recycling approximately 135 cubic feet of electronics. Electronics can contain materials such as lead, nickel, cadmium, and mercury that can pose risks to human health or the environment. Recycling these materials keeps these harmful materials out of landfills, reduces greenhouse gas emissions, reduces pollution, and saves energy.

### COMMUNITY EVENTS

A comprehensive public awareness and involvement program is central to successfully managing an environmental program. Therefore, MCIEAST – MCB CAMLEJ considers public outreach and education programs essential to acceptance and participation in environmental quality initiatives. To this end, EMD participates in community events to increase public awareness, enhance stakeholder relationships, and facilitate regional partnering.

Each hands-on activity in which the public can participate in the aspects of “Reduce, Reuse, Recycle” becomes an educational opportunity. A variety of planned activities, especially as they touch a part of everyday lives (school, business, and home), instill in the public mind the importance and far-reaching impact of their behavior.



Display included as part of CETEP training.

Responsibility for community events has been integrated into MCIEAST – MCB CAMLEJ’s Comprehensive Environmental Training and Education Program (CETEP), whose goal is to ensure that appropriate environmental instruction and information are provided to all levels of personnel to achieve full compliance with environmental training requirements. Its week-long program trains personnel from various commands in areas pertinent to

environmental protection. Following completion of the program, participants take this knowledge back to the community to help spread the message of the importance of environmental protection.

**QRP BY THE NUMBERS**

- 10,000 local visitors to the Sneads Ferry Shrimp Festival where education materials on MCIEAST – MCB CAMLEJ sustainability programs is displayed.

CETEP together with Natural Resources Program personnel provide educational materials and discuss environmental protection programs, including as they relate to the health of estuaries and waterways that support the local economy and the Eastern North Carolina way of life. This effort has included protection to habitats where the expansion of a training area would have otherwise encroached upon endangered species. Thus, CETEP helps to achieve the Conservation Program Management goals of the MCIEAST – MCB CAMLEJ SSPP, which recognizes the relationship between protecting natural resources and maintaining access to the variety of training environments and range areas critical to MCIEAST – MCB CAMLEJ’s mission.

The Sneads Ferry Shrimp Festival, which draws over 10,000 people each year, is an important venue for the EMD's public outreach efforts. This festival celebrates the local shrimping industry and serves as an important venue to educate the public on protecting the environment. Representatives from MCIEAST – MCB CAMLEJ attend the Sneads Ferry Shrimp Festival and provide general environmental awareness materials, "Reduce, Reuse, Recycle" sand pails, magnets, and reusable shopping bags.

**Program Management** – QRP Manager provided oversight to the planning and management of outreach activities that are key to increasing awareness of and participation in the program.

**Technical Merit** – Outreach programs have seen a significant increase in participation that has allowed the installation to meet the 50% SW diversion goal specified in EO 13514.

**Orientation to Mission** – The QRP supports the installation's mission by allowing the operations to continue while minimizing environmental degradation that could affect mission capability in the future.

**Transferability** – The QRP outreach program serves as a model for other installations to reach out to the community; the activities can be readily adapted and are scalable.

**Stakeholder Interaction** – The outreach program is designed to interact with a number of audiences, including but not limited to, service members, civilian employees, military families, and the surrounding community.

**Project Impact** – Outreach activities have increased QRP awareness, which have in turn led to meeting the 50% SW diversion goal, increasing revenue, decreasing landfilling costs, and increasing the audience participating in the recycling program.