



## 2015 Secretary of Defense Environmental Awards Sustainability, Non-Industrial Installation Award

Since 1962, the Department of Defense (DoD) has honored individuals, teams, and installations for their outstanding achievements and innovative work protecting the environment while sustaining mission readiness. The 2015 Secretary of Defense Environmental Awards recognize accomplishments from October 1, 2012 to September 30, 2014. A diverse panel of judges with relevant expertise representing federal and state agencies, academia, and the private sector evaluated all nominees to select one winner for each of the nine categories that cover six subject areas: natural resources conservation; environmental quality; sustainability; environmental restoration; cultural resources management; and environmental excellence in weapon system acquisition.

### About the Sustainability, Non-Industrial Installation Award

The Sustainability, Non-Industrial Installation award recognizes non-industrial installations that made significant progress implementing sustainable practices on an installation. Non-industrial installations include ranges, test centers, contracting and policy agencies/organizations/offices, and research and development centers. This award acknowledges efforts to prevent or eliminate pollution at the source, including practices that increase efficiency and sustainability in the use of raw materials, energy, water, or other resources. Sustainable practices ensure DoD protects valuable resources critical to mission success. The 2015 winner of the Sustainability, Non-Industrial Installation award is *Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms, California*.

### About Marine Corps Air Ground Combat Center Twentynine Palms

Over its 63 year history, MCAGCC's combined arms training mission has grown into a key component of DoD's strategic training. Past facility expansions and recent initiatives have resulted in a premier desert-training installation. To accomplish its mission, significant infrastructure resources are required at MCAGCC, which trains over 45,000 Marines annually with an approximate civilian and military population of 28,760. This includes operating and maintaining over 1,000 buildings/structures, 11 production wells, and a one million gallons-per-day wastewater treatment facility. In addition, MCAGCC annually consumes over 450,000 million British thermal units of energy, produces almost 15,000 tons of solid waste, and utilizes approximately 670 million gallons of potable water.

MCAGCC's sustainability program is a collaborative effort between the Natural Resources and Environmental Affairs Division, the Public Works Division, the Center Logistics Division, the local Southwest Regional Fleet Transportation office, outside stakeholders, and the community.



**MCAGCC:** *MCAGCC trains over 45,000 Marine Corps personnel annually. Past MCAGCC expansions and recent initiatives have resulted in the premier desert-training installation, with a population of nearly 29,000 military and civilian personnel. The desert environment mandated that sustainable approaches be implemented in order for the installation to excel in training Marines.*

## Major Accomplishments in FY 2013-2014

- Exceeded DoD's 30% reduction goal for energy intensity: MCAGCC improved energy intensity 32% compared to the FY 2003 baseline and the facility infrastructure improvements provided a cost savings of over \$600,000 per year. MCAGCC completed the installation of a new twin turbine high-efficiency cogeneration facility with two 4.6 megawatt (MW) gas-fired turbines and a heat recovery system designed to feed the current high temperature loop.
- Aggressively applied renewable energy solutions: MCAGCC added 0.75 MW of photovoltaic (PV) power, bringing the total to 5.2 MW of PV power installed at MCAGCC and achieving an annual cost savings of more than \$550,000.
- Exceeded DoD's water conservation goals: MCAGCC reduced potable water intensity by 45% (compared to the 2007 baseline), which is significantly more than the DoD's 26% reduction goal by 2020. In addition, non-potable water intensity was reduced by 71%, exceeding DoD's reduction goal of 20% by FY 2020.
- Continued leadership in waste diversion and recycling: MCAGCC's Hazardous Waste Minimization Program returned approximately \$638,000 in new or unused hazardous material for reuse. Proactive efforts reduced 192 tons of hazardous waste shipped off-site in FY 2014 compared to FY 2013. MCAGCC collected and demilitarized over 5.6 million pounds of range residue and ordnance debris, generating over \$1.26M in revenue in FY 2014.

The Headquarters Marine Corps Triennial Environmental Compliance Evaluation reflected MCAGCC's dedication to sustainability efforts. The evaluation concluded with positive finding for extensive sustainability and pollution prevention efforts, and going above and beyond statutory and regulatory requirements.

For information on past winners, please go to: [www.denix.osd.mil/awards](http://www.denix.osd.mil/awards).



**Earth Day Fun Run:** Outreach to the local community is an important aspect of the sustainability program at MCAGCC. This cooperation with the community and across the installation is vital to achieving the program goals and mission of the base. MCAGCC Earth Day events promoted sustainability efforts and initiatives.



**Waste Diversion:** MCAGCC is a leader in recycling and waste minimization. Range residue (e.g., spent casings and training-related metal debris) is collected, demilitarized, and recycled at MCAGCC's processing facility (shown here), providing over \$1 million annually in revenue from the sale of recycled material.