



## 2015 Secretary of Defense Environmental Awards Environmental Restoration, 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 Environmental Restoration, Installation Award

The Environmental Restoration, Installation award recognizes efforts of installations to protect human health and the environment by cleaning up contaminated DoD sites in a timely, cost-efficient, and responsive manner. The Department works to restore sites at active and closing military installations, as well as Formerly Used Defense Sites across the United States. Restoring these sites impacted by historic defense practices protects military personnel and the public from potential environmental health and safety hazards. The 2015 winner of the Environmental Restoration, Installation award is *Marine Corps Base Camp Lejeune, North Carolina*.

### About Marine Corps Base Camp Lejeune

Marine Corps Base (MCB) Camp Lejeune is at the forefront of DoD's environmental restoration programs. The Base Environmental Management Division leads the program with support from technical, acquisition, and legal professionals across the Naval Facilities Engineering Command organization. By maintaining collaborative relationships with regulatory agencies and a supportive local community, the team has made tremendous progress in investigating and cleaning up over 900 sites to date, including 49 sites during this achievement period. MCB Camp Lejeune holds quarterly meetings with regulatory agencies and the public to ensure continued progress and communication.

During the current award period, the Base's key initiatives included community outreach efforts, supporting the Base's mission to maintain combat-ready warfighters for deployment and humanitarian missions abroad, and planning for long-term cost avoidance using sustainable solutions. Community outreach efforts included proactive communication with building occupants regarding vapor intrusion, Munitions Response Site Prioritization Protocol scoring of three new Military Munitions Response Program (MMRP) sites, and updating the Community Involvement Plan. Investigations prior to military construction for key infrastructure improvements, development of facilities for the Marine Corps Forces Special Operations Command, and new air station



**Surface Danger Zone (SDZ) Investigation:**  
*The Base conducted a phased investigation from 2009 through 2013 to determine if any further action is necessary to protect human health and the environment on approximately 1,600 acres of SDZs.*

hangers supported the Base's mission. Camp Lejeune environmental personnel are cooperating with Leadership in Energy and Environmental Design (LEED) professionals to expedite closure through in situ methods and passive monitoring approaches.

### Major Accomplishments in FY 2013-2014

- Achieved remedy-in-place at Site 69, a former waste disposal area containing principal threat wastes, including chemical agent and dense non-aqueous phase liquid. Based on the extraordinarily high costs (over \$24 million) for removal, the Base and Navy worked with regulators and LEED professionals to design a passive remedial approach, including a 4.6-acre cap that was installed safely within 10 months.
- Successfully collaborated with regulators and landowners for an off-Base munitions investigation of over 1,000 anomalies, resulting in a reduction of Surface Danger Zone size from 1,600 acres to 176 acres for further evaluation to ensure continued protection of human health and the environment.
- Reduced the potential for human contact with munitions at the former Defense Reutilization and Marketing Office (DRMO) through a surface clearance and soil sifting operation over two acres to remove remaining munitions items. The operation resulted in the removal of over 79 tons of debris, including 24 tons of metallic debris that was recycled and over 6,000 munitions items.
- Decreased volatile organic compound concentrations by 75-98% at Site 78 within a hot spot of the 300-acre groundwater plume. MCB Camp Lejeune initiated the enhanced reductive dechlorination with bioaugmentation treatability study to plan for re-evaluation of the site closeout strategy, since concentrations had asymptotically leveled over time, demonstrating a decrease in the pump and treat system's effectiveness.

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



**Sediment Bed Passive Flux Meter (SBPFM):** CH2M HILL conducted a study in Wallace Creek to evaluate the effectiveness of a SBPFM to test and validate whether the technology can be successful in the field to measure the exchange water between the creek and subsurface.



**Passive Remediation:** Camp Lejeune implemented a passive permeable reactive barrier (PRB) as part of the final remedy at Site 89 to treat groundwater downgradient of the source area prior to reaching Edwards Creek.