

**Finding of No Significant Impact for the US Army's  
Technology Demonstrations at Ordnance Reef (Site HI-06), Wai'anae, O'ahu, Hawai'i  
[Remotely Operated Underwater Munitions Recovery System (ROUMRS) and Energetic  
Hazard Demilitarization System (EHDS)]**

**June 2011**

**AUTHORITY:** Pursuant to the National Environmental Policy Act (NEPA), as amended (42 USC 4347, Section 102 (2)(C); the implementing regulations issued by the Council on Environmental Quality (CEQ) (40 CFR 1500-1508); and Environmental Analysis of Army Actions (32 CFR 651), the Department of the Army gives notice that an Environmental Assessment (EA) has been prepared for a proposed technology demonstration at a military munitions sea disposal site (DoD Site Hawai'i 06 (HI-06) that is locally known as Ordnance Reef (herein referred to as Ordnance Reef (HI-06)). This site is in US coastal waters off Wai'anae, O'ahu, Hawai'i. During this demonstration, the Army will assess the Remotely Operated Underwater Munitions Recovery System (ROUMRS) and the Energetic Hazard Demilitarization System (EHDS).

**PROPOSED ACTION:** The Proposed Action (also referred to as the Demonstration) consists of technology demonstrations involving the limited recovery of underwater military munitions (UWMM) and the destruction (demilitarization) of any recovered UWMM using commercially available technologies that have been adapted, including development of new components and procedures, for the recovery and destruction of UWMM. Disposed UWMM are present at Ordnance Reef (HI-06) on the ocean floor in US coastal waters off Wai'anae. The Proposed Action is not an environmental action, but rather a limited (roughly 21-day) demonstration of technologies (ROUMRS and EHDS) designed to evaluate the limited remote recovery of UWMM and the at-sea destruction of any recovered UWMM. These demonstrations will provide the Department of Defense technologies that may be required to address UWMM that are determined to pose an unacceptable risk to human health and the environment, while addressing concerns raised by the state of Hawai'i and local communities about the munitions present.

**ALTERNATIVES CONSIDERED:** The alternatives for the demonstration of newly developed or adapted technologies are limited. The two alternatives considered are the Proposed Action and the No Action Alternative. Although the Proposed Action could be performed at another location, the Demonstration Site (Ordnance Reef (HI-06)) was determined to be the only viable location for these demonstrations because the Army possesses extensive knowledge about the munitions present at Ordnance Reef (HI-06), including the depth and grid coordinates of individual and clusters of munitions. The characteristics (i.e., close-to-shore, shallow water—less than 120 feet, and a hard bottom surface) of Ordnance Reef (HI-06) provides conditions ideal for limiting any potential impact to the environment and ensuring safety. The Army has no other sites where all these conditions exist, therefore, alternative locations were not considered viable.

**SUMMARY OF FINDINGS:** The EA evaluated the potential effects of the Proposed Action (the Demonstration) on environmental resources at Ordnance Reef (HI-06) and the surrounding area. Environmental resources that could potentially be impacted by the Proposed Action that were assessed included: air quality, noise, biological resources, water resources, public health and safety, recreational resources, historic and cultural resources, and socio-economic conditions. Potential impacts of the Proposed Action on these resources are summarized below.

- **Biological Resources:** Sensitive habitat (i.e., coral reef) and protected species can be found within Ordnance Reef (HI-06). Under the Proposed Action, the potential for inadvertent damage to corals

exists. However, the Proposed Action, which will be limited in scale and duration, will be guided by recommendations provided by the National Oceanic and Atmospheric Administration based upon pre-surveys of corals and UWMM completed prior to the initiation of the Proposed Action. Based on this guidance, the Proposed Action will not result in permanent or long-term, significant adverse impacts on biological resources.

- Air Quality: Significant adverse impacts to air quality would not occur as a result of the Proposed Action. The Hawaiʻi State Department of Health – Clean Air Branch concurs with this determination and has issued an Air Permit Exemption for the Proposed Action.
- Water Quality and Sediments: No significant impacts to marine waters are anticipated as a result of the Proposed Action. The Proposed Action will not involve the discharge of any pollutants, debris, or other materials that might adversely impact water quality and sediments.
- Public Health and Safety: No adverse impacts to public safety and health would occur as a result of the Proposed Action as approved safety measures would be adhered to during all Demonstration-related activities. The limited recovery of UWMM would result in potential beneficial impacts as UWMM are often encountered and investigated by recreational divers, and the limited recovery of UWMM from depths of between approximately 30 and 120 feet would reduce the potential human health and safety risks associated with divers moving, disturbing or attempting to recover UWMM as souvenirs, for scrap value or for other purposes.
- Noise Environment: Less than significant, short-term, temporary noise impacts are anticipated during implementation of the Proposed Action. Impacts on both the above-water and underwater noise environments will be reduced by limiting working hours and operational activities to approximately 12 hours per day. Implementation of the Proposed Action will not result in significant long-term adverse noise impacts.
- Historic and Cultural Resources: There will be no impacts to historic properties or cultural resources as a result of the Proposed Action because the Ordnance Reef (HI-06) is located more than one mile off-shore in waters between approximately 30 and 120 feet in depth. Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the US Army has received concurrence from the Hawaiʻi State Historic Preservation Officer on its determination that the Proposed Action will result in “no historic properties affected”.
- Socio-Economics and Marine Recreational Resources: Socio-economic conditions or marine recreational resources of the area would not be adversely impacted by the Proposed Action. The Waiʻanae community, including ocean users have been actively involved in the development of the Proposed Action and supports its implementation.

DECISION: Based on information compiled and analyzed during preparation of the EA, the US Army finds that the Proposed Action to demonstrate and assess ROUMRS and EHDS would not result in significant adverse impacts on either the man-made or natural environment. Therefore, an environmental impact statement will not be required.

PUBLIC COMMENTS: The Final EA and Draft FNSI were available for a 30-day review from April 8, 2011 through May 7, 2011. During this period, the Army received comment letters from one community member and two agencies. All comments received have been considered and addressed. Of the comments received, two requiring further clarification involve the use of the term “blowout,” and the description of the State’s artificial reef at Waiʻanae.

Clarification is as follows:

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*...Continuous Macroalgae – In these areas, macroalgae covers 90 percent or greater of the substrate. May include blowouts of less than 10 percent of the total area that are too small to be mapped independently. This includes continuous beds of any density (may be a continuous, sparse or dense bed)...*

The term *blowout* as used in the EA on page 30 is defined as small patches of macroalgae with bare spots and inconsistent cover.

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*...They include the three artificial reefs—Pōka'i Bay Artificial Shoal (created with old cars, concrete pipes and a steel barge in 1963), the Mahi shipwreck (sunk in 1982) and the seaplane wreck (sunk in 1986), the outfall pipe of the WWTP in Wai'anae town; and the thermal outfall of the Kahe power plant just south of Wai'anae (Kanenaka, 1991; Harrison, 1987)....*

Components of the State's artificial reef at Wai'anae also include tire modules which were added in the early 1990s, and the more recent additions of Z-type concrete modules that are regarded as hugely successful in boosting reef biomass.

Approved By:

JUN 2 2011



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