

D-10

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Land Division  
Honolulu, Hawaii 96813

June 9, 2011

Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

PSF No.: 11od-048

Oahu

Issuance of Right-of-Entry to U.S. Army of Corps of Engineers on State  
Unencumbered Submerged Lands for the Ordnance Reef Technology  
Demonstration Recovery and Demilitarization Project at Ordnance Reef (HI-06)  
off Waianae Coast, Oahu, Tax Map Key: (1) 8-5-002:Seaward of 044

APPLICANT:

U.S. Army of Corps of Engineers (USACE)

LEGAL REFERENCE:

Sections 171-55, Hawaii Revised Statutes, as amended.

LOCATION:

Portion of Government submerged lands situated off Waianae Coast on Oahu identified  
by tax map keys (1) 8-5-002:seaward of 044, as shown in **Exhibit A** attached.

AREA:

1,695 acres

ZONING:

State Land Use District:      Conservation

TRUST LAND STATUS:

Section 5(b) lands of the Hawaii Admission Act  
DHHL 30% entitlement lands pursuant to the Hawaii State Constitution: No

CURRENT USE STATUS:

Requested area is unencumbered

CHARACTER OF USE:

Technology Demonstration of the Remotely Operated Underwater Munitions Recovery System (ROUMRS) and Energetic Hazard Demilitarization System (EHDS).

TERM OF RIGHT-OF-ENTRY:

21-day period, expected to commence in July 2011, timing subject to prevailing weather and sea conditions. In addition, the Chairperson shall be authorized to extend the effective period of the right-of-entry for good cause. See Remarks Section.

CONSIDERATION:

Gratis.

CHAPTER 343 - ENVIRONMENTAL ASSESSMENT:

Environmental Assessment and Draft Finding of No Significant Impact for this project was published in the State Office of Environmental Quality Control's Environmental Notice dated April 8, 2011.

DCCA VERIFICATION:

Government agency. Not applicable.

APPLICANT REQUIREMENTS:

1. Issuance of a finding of no significant impact on the project by the USACE.
2. Obtaining the concurrence of the Division of Aquatic Resources.

REMARKS:

In 1992, the City and County of Honolulu's oceanographic team, while conducting a underwater survey for the Wai'anae Wastewater Treat Plant sewage outfall, discovered underwater military munitions (UWMM) between 0.3 and 0.6 miles northwest of the existing sewage outfall location.

In 2002, the subject site, Ordnance Reef (HI-06) was determined not eligible for the Defense Environmental Restoration Program-Formerly Used Defense Site (DERP-FUDS) program funding because "the Department of Defense never owned, leased, otherwise

possessed site, nor did it ever exercise control over it, except to use Ordnance Reef (HI-06) for the disposal of military munitions.”

Funding for the Ordnance Reef Project was eventually made possible through the efforts of Hawai‘i’s Congressional delegation and the U.S. Department of Defense (DOD) Office of the Deputy Assistant Secretary of the Army for Environment Safety and Occupational Health through its National Defense Center for Energy and the Environment.

A report released in March 2007 by the National Oceanic and Atmospheric Administration (NOAA), funded by the Army and Navy determined the boundaries of Ordnance Reef (HI-06) and the location of the UWMM which were found to occur from depths of approximately 30 to over 300 feet. In addition, the NOAA report provided information for use in identifying the type and approximate quantities of UWMM. Both the Army and Navy concluded that the UWMM present did not pose an immediate explosives safety risk to the public, and only deliberate activities (e.g. divers disturbing UWMM) posed a threat to those who use Ordnance Reef for recreation and other activities. However, both the Army and Navy determined that more study needed to be conducted to make a definite determination if the UWMM at Ordnance Reef posed a risk to human health.

According to the USACE, the UWMM present at Ordnance Reef are categorized as discarded military munitions (DMM), not unexploded ordnance (UXO). Meanwhile, USACE was not able to locate records regarding the disposal operations at the Ordnance Reef. By a survey of UWMM at Ordnance Reef completed by NOAA, munitions were visually identified. The DOD still needs to determine if the UWMM pose an unacceptable risk to the public and the subsequent responses needed, if necessary.

In this demonstration project, the Remotely Operated Underwater Munitions Recovery System (ROUMRS) and Energetic Hazard Demilitarization System (EHDS) will be used to recover and then dispose of UWMM respectively. The EHDS employs remote cutting and contained thermal destruction of exposed explosive munitions constituents (MC) without generating explosive gases, thus avoiding need for detonation using explosive charges, which has been the DOD’s standard method of disposal for UWMM. In addition, the techniques and tools currently in use by the DOD to recover UWMM are not cost effective for large quantities of UWMM or those occurring at depths greater than 120 feet, and can expose divers and support teams to a variety of potential hazards. The proposed demonstration technologies may offer the DOD cost-effective alternatives and the safe, remote recovery and disposal of UWMM in an environmentally benign manner that does not increase potential explosives safety risks.

Today’s request to the Land Board is to allow the USACE and its contractors to conduct a demonstration of the ROUMRS and EHDS technologies at the project site shown in **Exhibit B**, attached hereto.

Staff understands the USACE will deploy its remotely operated vehicle (ROV) from a 75-

foot support vessel. Munitions recovered by the ROV in specially designed salvage baskets will be transported to the Demilitarization Support Vessel (DSV) by the ROV or attached to air-filled lift bags. Demilitarization and destruction activities will be conducted on board the DSV. A map showing the work areas and mooring sites are attached as **Exhibit C**.

The purpose of the technology demonstration is to evaluate the recovery of UWMM using the ROUMRS equipment and at-sea destruction of recovered military munitions using EHDS methods. The demonstration is scheduled to be conducted within an approximately 21-day period, with its activities performed daily Monday through Friday from 6:00 am to 6:00 pm. Staff understands the DSV will remain moored in the work areas throughout the demonstration activities. Best management practices will be employed to lower moorings, anchorages and equipment to the bottom. While no detonations are planned, a certain amount of risk remains when dealing with UWMM, so an appropriate explosive safety quantity distance (ESQD) will be maintained at all times around the DSV supporting the EHDS to keep members of the public at a safe distance from these operations. Start date, scheduling, and duration of the work period are subject to change depending on prevailing sea state, weather conditions, and other factors. The USACE requests right-of-entry for use of the demonstration site as shown on Exhibit 2 during the roughly 21-day project period. To account for possible delay due to weather or other factors, staff recommends the Board authorize the Chairperson to be able to extend the effective period of the right-of-entry for good cause.

Comments from various agencies were sought by the Army during the preparation of the Environmental Assessment (EA) and responses from the Army have been incorporated in the EA.

Division of Aquatic Resources (DAR) responded to the Army by its letter dated May 5, 2011 attached as **Exhibit D**. At the time of writing this submittal, the USACE had not provided any response to DAR's issues. Staff was verbally advised by the USACE that they will respond to DAR's comment. In addition, the USACE plans to issue a statement of finding of no significant impact created from this project in early June 2011.

In view of the critical timing required to coordinate and arrange the various resources for the project, the USACE requests the issuance of a right-of-entry before June 24, 2011.

Staff recommends the Board authorize the issuance for the requested right-of-entry upon the issuance of a statement of the finding of no significant impact by the USACE and the concurrence of DAR.

There are no other pertinent issues or concerns. Subject to comments mentioned above, staff has no objection to the request.

RECOMMENDATION:

That the Board, upon the Applicant's fulfilling the Applicant Requirements mentioned above, authorize the issuance of a right-of-entry to U.S. Army Corps of Engineers covering the subject area under the terms and conditions cited above, which are by this reference incorporated herein and further subject to the following:

1. The standard terms and conditions of the most current right-of-entry form, as may be amended from time to time;
2. Authorize the Chairperson extend the effective period of the right-of-entry for good cause;
3. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State;
4. Authorize the Chairperson to issue future right-of-entries to the Applicant in relation to its site investigation to determine the existence of unexploded ordinance purpose.

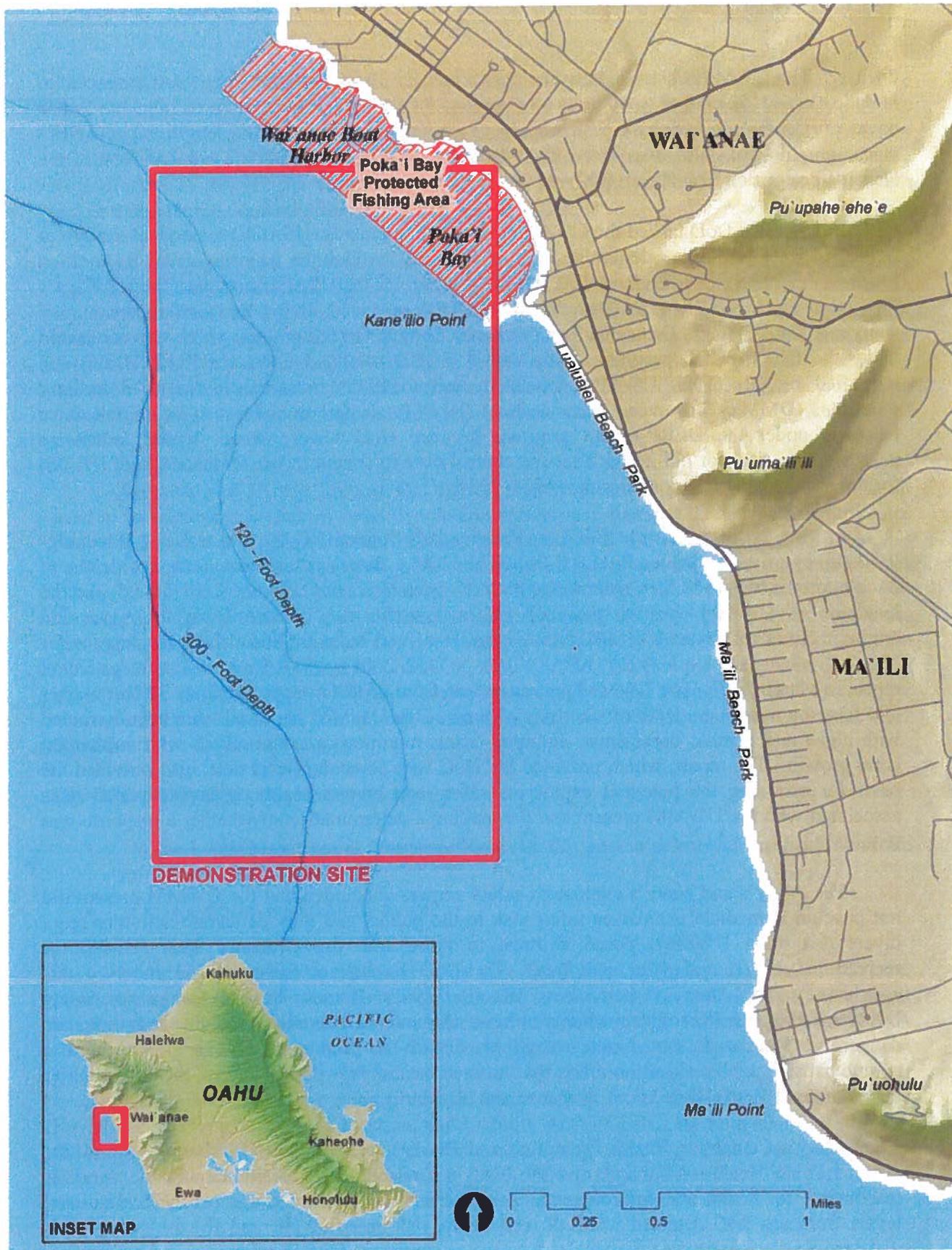
Respectfully Submitted,

  
for Barry Cheung  
District Land Agent

APPROVED FOR SUBMITTAL:

  
William J. Aila, Jr., Chairperson





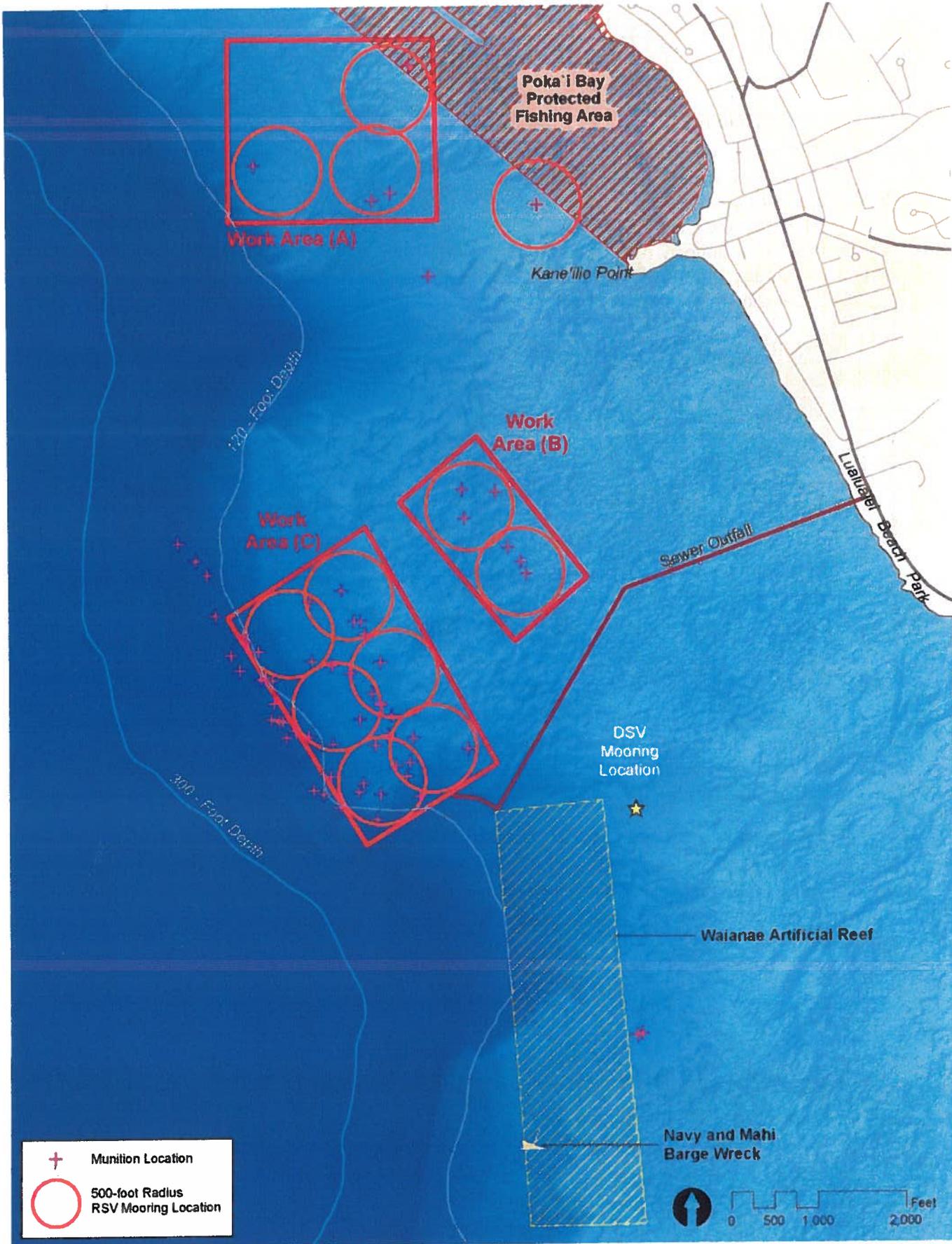
**DEMONSTRATION SITE [Ordnance Reef (HI-06)]**

EA for Technology Demonstration: ROUMRS and EHDS at Ordnance Reef (HI-06)

**FIGURE 1**

Wai'anae, O'ahu, Hawai'i

**EXHIBIT " B "**



**Proposed Work Areas and Mooring Sites**

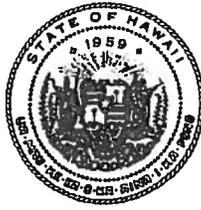
EA for Technology Demonstration: ROUMRS and EHDS at Ordnance Reef (HI-06)

**FIGURE 3**

Wai'anae, O'ahu, Hawai'i

**EXHIBIT "C"**

NEIL ABERCROMBIE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF AQUATIC RESOURCES  
1151 PUNCHBOWL STREET, ROOM 330  
HONOLULU, HAWAII 96813

WILLIAM J. AILA, JR.  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY KAULUKUKUI  
FIRST DEPUTY

WILLIAM M. TAM  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

May 5, 2011

U.S. Army Corps of Engineers – Honolulu District  
Attn: Lori Wong, Project Manager  
Bldg. 252, CEPOH-PP-E  
Fort Shafter, HI 96858-5440

Dear Ms. Wong:

The following comments are made after review of the draft Environmental Assessment (dEA) for the ROUMRS and EHDS projects proposed for demonstration at the Waianae ordnance reef project. In summary, the Division finds several areas where questions arise relative to the determination of no significant impact. Specific citations follow.

dEA, p.5: A statement is made that a UH study to determine whether or not fish and other marine life of the area are safe to consume shall be made available after the Army's review – this report will assist the public in its understanding of potential impacts to marine life taken from the area for human consumption. As such this report should be appended to the final EA.

dEA, p. 22,23: An explosive safety zone of 3,727 feet is to be maintained around the Demilitarized Support Vessel (DSV) or barge during the proposed 21-day operation. Further, an Explosive Safety Site Plan is in development and should be approved before the demonstration project. Since this zone would come as close as 200 yards from the shoreline, the Army is encouraged to share the subject site plan as soon as practical with affected State and County agencies so that the public users of the shoreline and nearshore waters are forewarned.

dEA, p. 30: The term, "blowouts" is unknown in scientific literature and terminology – an alternative more descriptive term is suggested. If the reference is meant to describe marine algae assemblages that are often patchy, and inconsistent in coverage, then an appropriate term should be substituted.

dEA, p. 37: The proposed location of the DSV barge is just north of the existing state artificial reef, on "sand or uncolonized hard bottom". The dEA states that NOAA will be responsible for final identification of the barge site. We note that in NOAA's Coral

Avoidance and Minimization of Injury Plan (CAMIP) that NOAA recommends mooring be in sand habitat to the seaward side of the artificial reef. Final confirmation of a suitable site should be derived prior to the demonstration project to best protect marine life. A caution is issued regarding the use of sand habitat at times other than the proposed summer months in 2011. Sand habitat at this depth is known for Kona crab, a desired species sought by local fishers. The crab is protected by a closed season in the summer months, but is open to fishers at other times of the year. Further specific information as to habitat of the area and local fishing practices may be obtained thru consultation with the Division.

dEA, p. 39 The first paragraph is seeming a policy statement on whether or not to remove an DMM (discarded military munition) based on the removal procedure's potential to impact a coral colony that is 12 inches or greater in height. The Division encourages removal since coral species, if not uncommon can recover, and it is important that the potential threat be removed at all possible as this kind of effort is long overdue. Consultation in addition to NOAA should include the DLNR.

dEA, p. 40: A statement is made relative to the importance of re-attaching dislodged coral colonies and that even if not done, dead colonies still provide habitat complexity. While re-fixing live colonies to the subject may improve their chances of survival, dead and loose colonies may serve to promote future damage in the event of high wave energy events (as in storms) and serve to move loose colony fragments, thus scouring the sea bottom, and possibly damaging other live colonies. All efforts should therefore be made to re-attach broken live corals; barring this, they should be removed from the area.

A caution is issued relative to the placement of the DSV barge and its processing operations (p.19, dEA). The proposed siting of the barge is in close proximity of the state's artificial reef. This reef contains high biomass of fish and other marine life, and local fishers, recreational and commercial depend on its production. Therefore, care should be taken to prohibit any discharges – waste water, washings, etc., from running off the barge and into the ocean waters surrounding the artificial reef. Appendix L contains a letter describing potential by-products of the decommissioning process. Water used in saw cutting of DMM will have metal particles as well as unremediated munition constituents. Water volumes estimated to be produced are not presented, and the fate of these washings is not discussed. Whatever the volumes of washwater and cuttings water produced, they should be retained and processed so as to retain potentially harmful particulates from reaching the sea and being introduced into the food chain. It is recommended that the Division be consulted on the mooring placement of the barge such that direct impacts are minimized.

dEA, p.42: The general description of the state's artificial reef at Waianae is outdated and requires the inclusion of more recent information as to its status – for example, the use of tire modules as reef components added in the early 1990s, and more recent

additions of Z-type concrete modules that are regarded as hugely successful in boosting reef biomass.

dEA, p. 43: Mitigation measures proposed to reduce impacts to the artificial reef have been oversimplified. Although strict adherence to the proposed best management practices (BMPs) would do much to protect corals and fish, the above-mentioned recommendations would further protection of resources, especially when considering the DSV operational concerns and its siting in proximity to the state's artificial reef.

dEA, p.45: A statement is made that nine listed (as vulnerable) do not occur in the project area. A greater effort should be made to confirm this, as especially the Montipora species, should be present on Waianae coral reefs.

dEA, p. 54: Safety zones proposed encompass approximately 75% of the state's artificial reef and as close to shore as 200 yards. A variety of activities occur within the safety zone; for a more direct comparison, the zone identified in Fig. 12 should be overlain on Fig. 13, which describes ocean recreation resources. In addition to this, commercial activities occur within the zone, and these should be accounted for as well. Specifically, kayakers, stand-up paddle boarders, outrigger canoe practices/runs should be considered in the overall impact to ocean users.

dEA, p. 58-61: Overall the Division feels that the impacts to recreational (and commercial) activities have been underestimated. It does not account for commercial tours from the private marina at Ko Olina, coastal tour activities from Waianae SBH, summer fishing tournaments, canoe club practices, dive tour operations, etc.. That the statement made that the proposed project areas do not hold any cultural significance, may need to be reexamined, as native Hawaiians place a great deal of importance on activities such as sustenance gathering that takes place well out to sea, as well as ocean recreating, and the philosophy that the ocean is their source of vitality and well-being. An organized plan for outreach in preparation for a 21-day closure, notifying affected parties, would greatly serve to ameliorate impacts to everyday life for area residents and businesses.

dEA, p.66: A statement is made as to the relative contribution of commercial landings of marine life from the Waianae area (667,466 pounds, 11% of state total in 2008). The emphasis should be on the 667,466 pounds which is estimated to be valued at about \$1.3M, ex-vessel, since seafood is highly prized in Hawaii and there is great demand for it. Thus this represents the value to the area, its residents and a contributor to its economic strength.

dEA, p. 68: The summary of impacts table may need to be revised in light of comments made (above).

Appendix C, CAMIP: The Division is in basic agreement with NOAA's assessment and recommendations, with few exceptions, and have been noticed above. With respect to

U.S. Army Corps of Engineers  
Honolulu District  
May 5, 2011  
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creating a priority for the work areas, consideration should be given to removal of small arms ammunition (SAA) manually by divers. This would be less of an expense to the operation, and if feasible, an outreach/community participation effort could be envisioned where volunteer divers retrieve SAA. Consideration for this could boost Army position with the community.

Appendix E, CZMA consistency determination: Reference is made to enclosure 6 of the Army permit application, p. 4 of 19, Other Certifications or Approvals/Denials Received: Hawaii DLNR coral/live rock permit, applied for August 12, 2010, that the permit is not required. Any take of coral or live rock by Hawaii Administrative Rule is prohibited. Because of this a permit issued under the authorization of 187A, HRS is required. This information was presented to the Army in a meeting with Department officials in December 2009.

Appendix L, Solid and Hazardous Waste Disposal Permit application: In this document and its attachments, detailed descriptions of the demilitarization process are provided. One concern over disposal of wash water from cutting DMM has been relayed (above). Another is related to the byproducts of the heating process of the munition constituents. Under "White Paper- Energetic Hazard Demilitarization System", page 50 of 54 states that decomposition data on identified energetics is not available under the proposed heat process system. However "extensive data is available on decomposition pathways and products under conditions that can be applied to the EHDS system". By all account, the by-products of MC should be gases – CO, NO, NO<sub>2</sub>, CO<sub>2</sub>, etc.. This should be confirmed by acknowledged specialists, such as can be found in the U.S. EPA.

Thank you for this opportunity to provide comments.

Sincerely,

  
for

FRANCIS G. OISHI, Program Manager  
Division of Aquatic Resources

c: William J. Aila, Jr., DLNR Chairperson  
Land Division, DLNR  
HEER, DOH