PALI TRAINING CAMP
RESTORATION ADVISORY BOARD (RAB) MINUTES
WEDNESDAY, JUNE 12, 2013
KAILUA HIGH SCHOOL CAFETERIA
451 ULUMANU DR
KAILUA, ISLAND OF OAHU, HAWAII

1. Kevin Pien called the meeting to order at 6:42 p.m. and welcomed everyone.

2. Those in attendance included Government Chair Kevin Pien of U.S. Army Corps of Engineers (USACE); RAB members Dr. Charles Burrows, Leslie R. Kahihikolo, Marti McCracken, Francis A. Ritchey III, Bert K. Wong, Donna Wong, and Shannon Wood.

   Others in attendance included Mike Mullen of U.S. Army Corps of Engineers (USACE), Steven Mow and Paul Chong from the State of Hawaii-Department of Health.

   Contractors present included Cariann Ah Loo and Eric Takamura of Huikala and Clayton Sugimoto of WCP Inc. (WCP).

   RAB members absent were Dr. Paul Brennan, Dawn Chang, Victoria Creed, Kimberly Kalama, Maya L.K. Saffery, and Kelly Tomioka.

The agenda of the meeting was:

I. Welcome and Introductions
II. Restoration Advisory Board (RAB) Orientation
III. Restoration Advisory Board (RAB) Charter/SOP
IV. Pali Training Camp Remedial Investigation/Feasibility Study (RI/FS)
V. Next Meeting

Name	Action Items from 12 June 2013	Suspense Date	Completed
Kevin Pien	Federal dollars spent on the investigation and how it relates to release of information to the public.	July 23, 2013	July 23, 2013
Kevin Pien	When the Archaeological Monitoring Plan is finalized send a copy to Chuck.	July 23, 2013	
Kevin Pien	Identify State lands and plot on Google map	July 23, 2013	July 16, 2013
Kevin Pien	Check whether historical Hawaiian language newspapers were researched as part of the archaeological monitoring plan literature search.	July 23, 2013	July 23, 2013
Leslie Kahihikolo	Email draft RAB charter to RAB members for review and comment	July 23, 2013	July 2, 2013
Kevin Pien	Address cultural monitoring issue	July 23, 2013	July 23, 2013
Kevin Pien Leslie Kahihikolo	Coordinate site visit before/after start of field work	July 23, 2013	July 23, 2013

I. Welcome and Introductions
   A. Reviving Pali/Heeia RAB-now both projects are separated into two projects
      a. Pali Training Camp
      b. Heeia Combat Training Area
   B. Former RAB members are Leslie R. Kahihikolo, Shannon Wood, and Donna Wong

II. Restoration Advisory Board (RAB) Orientation
   A. Agenda
      a. What is a RAB and what is its purpose?
      b. Who are the members of a RAB?
      c. What are the roles and responsibilities of RAB members?
      d. How does the RAB operate?
   B. What is a RAB?
      a. Stakeholder group
         - community members, land owners
         - concerned individuals
         - federal regulators
      b. Regular meetings-open to the public
      c. Discuss environmental restoration at current/former Department of Defense (DoD) property
         - DoD is overseeing environmental restoration process
   C. Purpose of RAB?
      a. Community involvement
      b. Provide public input to installation decision makers
      c. Help distribute information to the community
      d. A forum to share questions, concerns, and ideas
   D. What do RABs discuss?
      a. Addresses issues associated with environmental restoration activities
      b. Other issues are referred to appropriate offices
   E. Who are the members of RAB?
      a. Local citizens and landowners
      b. US Army representatives
      c. State environmental regulatory agencies representatives
      d. Local government representatives

- K. Pien stated the Corps of Engineers operate with rights-of-entry agreements with the landowner to gain permission to access the property. The landowners have been contacted about the project.

F. RAB Membership

a. Membership is:

- Voluntary
- Not compensated
- Equal status amongst all members, except co-chairs

G. RAB Co-Chairs

a. Each Restoration Advisory Board is chaired by two people, a US Army Corps of Engineers representative and a community representative.

- The US Army representative is selected by the Commanding Officer
- The community representative is selected by the community members
- Co-chairs serve as equal partners

H. Member Responsibilities

a. Reviewing documents and site information

b. Attending meetings

c. Act as conduit for exchange of information

- Both to and from the community

d. Represent and communicate community concerns to RAB

I. Co-Chair Responsibilities

a. Includes all RAB member responsibilities PLUS:

- Jointly determine meeting agendas
- Act as focal point for community outreach
- Serve as liaison to installation (US Army co-chair) and community (community co-chair)

J. US Army Co-Chair

a. Ensure community issues and concerns related to the restoration are addressed when raised

b. Ensure documents distributed to the RAB are also made available to the general public

- Kailua & Kaneohe Public Libraries
- email & website

c. Ensure adequate administrative support to the RAB is provided

d. Refer issues not related to the project a Pali Training Camp to the appropriate installation official

K. Community Co-Chair

a. Ensure community members participate in an constructive manner

b. Ensure community issues and concerns related to restoration are raised

c. Assist with the dissemination of information to the general public

d. Report back to the community

e. Serve without compensation

L. RAB Resources

a. DoD Environment, Safety and Occupational Health Network and Information Exchange (DENIX)-www.denix.osd.mil/rab/

b. RAB Rule (71 Federal Register 27610, May 12, 2006)

- RAB activities
- Establishment of RAB
- Operating procedures
- RAB member responsibilities
- Adjourn, dissolution of RAB

c. RAB Rule Book

d. RAB Regulation-32 CFR Part 202 (recommend www.ecfr.gov)

M. RAB Charter or Standard Operating Procedures (SOP)

a. Specifically addresses:

- Goals and objectives
- Size of RAB
- Membership terms
- Attendance Requirements
- Meeting frequency and location

b. Procedural Outline

- RAB and co-chair member selection
- Public participation
- Agenda development
- Rules of Order

III. Restoration Advisory Board (RAB) Charter/SOP

A. Agenda

a. Charter Highlights
   - Membership
   - Community Co-Chair election
   - RAB Member Responsibilities
   - Meeting schedule

b. Way Ahead

B. Charter Highlights *Official Membership*
   a. Members approved by RAB
   b. 2 year term
   c. New membership
      - Co-chairs add to agenda
      - Voted by RAB members
        - K. Pien recommended to accept all members that have applied
        - S. Mow suggested the charter not have a quorum
        - L. Kahihikolo asked that all members have a vested interest in Kailua
        - All RAB members agreed with not having a quorum. Add this to the charter.

C. Charter Highlights *Community Co-chair Election*
   a. Elected by majority of the community RAB members
   b. 2 year term; more if reelected
   c. Does not require environmental restoration experience/knowledge
   d. Committed to position as liaison to community

D. Charter Highlights *RAB Member Responsibilities*
   a. Attendance
      - Designation of alternate
      - 3 consecutive absences, consideration for resignation
   b. Participate openly and constructively
   c. Communicate with local community

E. Charter Highlights *Meeting schedule*
   a. Minimum of twice a year
      - Additional or special focus as need arises
   b. Open to general public
   c. Scheduled by Co-Chairs

F. Way Ahead

a. Tonight:
   - New membership
   - Co-chair candidates identified

a. Confirm acceptance to run for position
   - Questions concerning Charter annotated and/or addressed

b. No later than week prior to Meeting #2
   - Draft final RAB Charter will be mailed with invitation

c. Next Meeting:
   - Vote on Co-chair position
   - Vote on Acceptance of Charter

- L. Kahihikolo moved to accept all 12 members of the community to be on the RAB and D. Wong seconded. A unanimous vote by RAB members present accepted all members.
- K. Pien asked if others would be interested in being community co-chair. Shannon Wood moved to have L. Kahihikolo become the community co-chair. A unanimous vote by RAB members present accepted L. Kahihikolo to be the community co-chair.
- Defer charter to next meeting. Compare samples and recommendations to add to charter. Decide what will be in the charter at the next meeting.

IV. Pali Training Camp-Remedial Investigation/Feasibility Study (RI/FS)

A. Lead Agencies

a. US Army Corps of Engineers-Honolulu District
   - Kevin Pien, Geographical Project Manager
   - Mike Mullen, Ordnance and Explosives Safety Specialist (OESS)

b. US Army Engineering and Support Center, Huntsville-Military Munitions Design Center
   - Provides contract management and technical expertise

B. Stakeholders

a. State of Hawaii Department of Health
   - Office of Hazard Evaluation and Emergency Response

b. US Fish and Wildlife Service

c. State of Hawaii Department of Land and Natural Resources
   - Land Division
   - State Historic Preservation Division
   - Division of Forestry and Wildlife

d. Restoration Advisory Board Members

C. Public Outreach

a. Communication

- Public Information and Restoration Advisory Board Meetings
- Fact Sheets
- Public Notices (Honolulu Star Advertiser, MidWeek)

b. Administrative Record

- Information repositories have been established as par of the project and includes site related documents.

D. Why are we here? The FUDS Program

a. The USACE is here to address military munitions potentially remaining at the Former Pali Training Camp

b. In the 1980s, Congress established a program to cleanup eligible FUDS location

c. *Formerly Used Defense Sites are real property that were under the jurisdiction of the Secretary and owned by, leased to, or otherwise possessed by the Department of Defense (DoD) that were transferred from DoD control prior to October 17th, 1986.*

E. CERCLA Process

a. The DoD's framework for environmental restoration is the CERCLA process.

- Program funded by the Defense Environmental Restoration Account/Program (DERA/DERP)

b. CERCLA is the Comprehensive Environmental Response, Compensation, and Liability Act

- Inventory Project Report (INPR)
- Preliminary Assessment/Site Inspection (PA/SI)
- Remedial Investigation/Feasibility Study (RI/FS)
- Proposed Plan (PP), Decision Document (DD), Remedial Action (RA), and Post Remedial Action

F. MMRP Terminology

a. Munitions and Explosives of Concern (MEC)

b. Unexploded Ordnance (UXO)

c. Discarded Military Munitions (DMM)

d. Munitions Constituents (MC)

e. Material Potentially Presenting an Explosive Hazard (MPPEH)

G. Munitions and Explosives of Concern (MEC)

a. This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks includes:

- Unexploded Ordnance (UXO),
- Discarded Military Munitions (DMM), or
- Munitions Constituents (MC) *present in high enough concentrations to pose an explosive hazard.*

H. Unexploded Ordnance (UXO)

a. Military munitions that have been:

- Primed, fuzed, armed, or otherwise prepared for action, and have been
- Fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and
- Remain unexploded either by malfunction, design, or any other cause.

[Military Munitions Rule 40 CFR 266.201]

I. Discarded Military Munitions (DMM)

a. Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal.

b. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of, consistent with applicable environmental laws and regulations.

J. Munitions Constituents (MC)

a. Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

(10 U.S.C. 2710(e)(4))

K. Types of Military Munitions

a. Grenades

b. Rockets

c. Projectiles (includes mortars)

d. Guided missiles

e. Bombs

f. Dispensers, cluster munitions, and sub munitions

g. Landmines

h. Naval mines

i. Small arms ammunition

L. Sources of MC in Munitions

a. Main Components

- Shell
- Filler
- Case
- Propellant

b. Minor Components

- Primer
- Fuze
- Booster

M. Examples of MC

a. Filler

- High explosives (TNT, RDX)
- Chemical agents (Mustard, Lewisite)
- Riot control (Tear gas: CN, CS)
- Pyrotechnics
  i. Illumination, incendiaries, tracers (perchlorate, metals)
  ii. Smokes (Hexachloroethane (HC), White Phosphorus (WP), metals

a. Armor Piercing/Penetrators

- Tungsten
- Depleted Uranium (DU)

b. Propellants

- Black powder
- Nitrocellulose (NC), nitroglycerine (NG), and nitroguanidine (NQ)
- Perchlorate

c. Case

- Metals

N. MRA and MRS

a. **Munitions Response Area (MRA)**: Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples are former ranges and munitions burial areas. An MRA comprises one or more munitions response sites.

b. **Munitions Response Site (MRS)**: A discrete location within an MRA that is known to require a munitions response.

[32 CFR part 179]

O. Why are we here? The Pali Training Camp FUDS Project

a. The Pali Training Camp FUDS was used by the Army between 1943 and 1945.

b. In 1945, the land was released by the Army back to the previous landowners.

c. The Corps is conducting a Remedial Investigation to determine the nature and extent of the munitions contamination.

P. Project Information-Site Description

a. Approximately 4,400 acres located in Kailua, Oahu at the foot of the Koolau Mountain range.

b. Consists of four noncontiguous parcels situated in portions of the Makalii and Maunawili Valleys.

- 3,450 acres – Maunawili Valley Impact Area
- 400 acres – Maunawili Site
- 46 acres – Makalii Valley (Maunawili Stream Area)
- 500 acres – Ulumawao Site

Q. Location Map

R. Site History

a. Established in 1943 as a regimental combat training center

b. Used for jungle training

c. Housed 3,000 to 5,000 troops in sprawling tent city

d. Camp was closed in 1945 and the land was released to the Kaneohe Ranch

e. Approximately 1,500-acre area believed to have been used as an artillery impact area

- S. Wood asked if research was done for animals, birds, etc., in the 1940's. K. Pien stated he was not sure if there was a report completed in 1940's, but moving ahead, a biological report is being done for this project.

S. Previous Investigations

a. 1994 Inventory Project Report

- Established the site as an eligible FUDS property.
- Established the preliminary site boundary.
- Summarized the historic military usage at these former military training areas.
- Munitions historically detected include:
  - i. 75-mm high-explosive (HE) projectile
  - ii. 60-mm HE mortar
  - iii. 37-mm HE projectile
  - iv. 2.36- and 3.5-inch high-explosive anti-tank (HEAT) rockets

b. 2008 Engineering Evaluation/Cost Analysis

- Qualitative reconnaissance conducted in the Maunawili Valley Impact Area, Maunawili Site, and Makalii Valley (26.3 acres total)
- Focused on 5.7 acres of grids in the Maunawili Valley Impact Area using digital geophysical mapping (DGM)
- Munitions and munitions debris found included:
  i. 81mm mortars
  ii. 75mm HE projectiles
  iii. 75mm shrapnel projectiles
  iv. 37mm projectiles
  v. HE munitions fragment
  vi. Fuze

c. 2009 Site Investigation

- Collected soil, sediment, and water samples and analyzed for munitions constituent metals, explosive compounds, and white phosphorous
- Soil Sampling Results
  i. Munitions Constituents Metals – Aluminum, arsenic, chromium, iron, and vanadium were identified as a contaminants of potential concern.
  ii. No explosive compounds or white phosphorous were detected.
- Sediment Results
  i. No constituents were detected.
- Surface Water Results
  i. One explosive compound was identified.
  ii. White phosphorous was not detected.

d. 2012 Removal Action

- Removal performed in the Maunawili Valley Impact Area.
- 1,067 pounds of MD removed.
- 26 MEC items recovered and destroyed, including the following types:
  i. 60-mm HE Mortar, M49A2
  ii. 37-mm HE Projectile, M63
  iii. 20-mm Ball Cartridge, MK1 (unfired)
  iv. 20-mm Ball Cartidge, M55A1 (unfired)
  v. 81-mm HE Mortar, M43A1
  vi. 75-mm Shrapnel Projectile, MK1

vii. 57-mm APT Projectile, M70

viii. 37-mm APCT Projectile, M59

ix. 2.36-inch Rocket Motor

x. Fuze of a Projectile TSQ

xi. Fuze of Projectile PDSQ

xii. Fuze of a Projectile, M1907M

T. Location Map

U. Purpose and Objectives

a. The purpose of the RI/FS is to meet the following objectives:

- characterize the nature and extent of contamination from munitions
- gather data necessary to assess the risk to human health, safety, or the environment
- develop remedial action objectives
- develop and evaluate remedial alternatives

V. MEC Technical Approach-Cariann Ah Loo of Huikala

a. Limited Vegetation Removal

b. MEC Investigation – Analog/Hand-Held Instruments

c. MEC Disposal

d. MEC/MD Accountability

e. Government Quality Assurance for all intrusive MEC investigations

W. Data Quality Objectives-MEC Investigation

a. Delineate the nature and extent of MEC contamination in accessible areas with at least a 90% confidence level of identifying impact areas within the Maunawili Valley Impact Area and Maunawili Site.

- less than 18 degrees slope
- 30 degrees in work plan reduced it to 18 degrees for safety concerns

b. For areas outside of the MEC-contaminated areas, determine with 90% confidence that the concentration of UXO in residential areas are less than or equal to 0.1 UXO per acre and low-use areas are less than or equal to 0.5 UXO per acre.

- Within each parcel we are able to distinguish if the area is used or will be used as a low use area. Current and future use of the parcel is looked at to determine the areas to be cleared.

c. Assess potential risks to human health and the environment associated with MEC and evaluate effective remedial alternatives given the anticipated future land use.

X. Transect Installation and Vegetation Removal

a. 3-feet wide parallel transects spaced 350 ft apart will be established using GPS or traditional survey methods.

- Target radius assumed to be 500 feet based on the MK II 37-mm projectile.

b. Limited amount of vegetation will be removed using hand-held cutting equipment.

- Vegetation clearance is only a 4 inch diameter or less at chest height and will only be removed if necessary
- Chainsaws and brush cutters will be used to cut the vegetation.

c. Vegetation will be cut to within 6 inches of the ground surface.

d. Threatened and endangered species/significant cultural resources will be avoided.

- It will be documented in the Archaeological/Biological reports.

Y. MEC Technical Approach-Biological Monitoring

a. Perform literature research to identify threatened and endangered species within investigation area.

b. Identify threatened and endangered species and their habitats during transect layout.

c. Train/brief field personnel on potential species of concern.

d. Implement avoidance measures during investigation activities.

e. Prepare a Biological Report upon completion of field activities.

Z. MEC Technical Approach-Archaeological Monitoring

a. Field work to be conducted in accordance with an approved Archaeological Monitoring Plan (AMP).

b. AMP will include:

- project location, background history, and environment
- site type found in similar environmental ecosystem
- a minimal research design
- proposal for performing the monitoring with minimal impact to the ongoing work
- steps to be taken in the event of unexpected or inadvertent discovery of human remains or significant cultural resources

c. Field Strategy: Avoidance of all culturally significant and sensitive areas.

AA. Transect Design

BB. MEC Investigation

a. Conducted using analog instruments – Minelab Explorer SE or equivalent.

b. Analog instruments assist MEC investigation personnel in locating surface/subsurface anomalies.

c. Data from transects will inform where to place grids.

d. Detection equipment will be tested daily on test plot(s) or test strip(s) to demonstrate instrument and operator efficiency.

CC. Intrusive Investigation and Removal of Anomalies

a. Performed by UXO-qualified personnel.

b. Excavate by hand as described in the Work Plan.

DD. MEC Disposal

a. Huikala will use UXO qualified personnel for all demolition operations.

b. All acceptable-to-move UXO/MEC encountered during the MEC investigation will be consolidated for disposal.

c. Fuzed/unacceptable-to-move items will be blown-in-place (BIP).

d. Engineering controls will be used as necessary.

EE. MEC Technical Approach-UXO Estimator

a. Determine location/quantity of grid surveys that will be performed in areas outside of MEC impact areas.

b. Conduct analog geophysical grid surveys.

c. Verify MEC density is below:

- 0.1 UXO per acre for residential areas
- 0.5 UXO per acre for low use areas

FF. Personnel and Explosives Limits (DA Pam 385-64)

a. Operations must be conducted in a manner which exposes the minimum number of people to the smallest quantity of explosives for the shortest period of time consistent with conducting the operation.

b. Personnel not needed for the operation will be prohibited from visiting

c. This does not prohibit official visits by safety, quality control, management, or inspection personnel, up to established personnel limits

GG. MEC/MD Accountability

a. Detailed logs of all MEC/MD items encountered. Log descriptions include nomenclature, condition, location, depth of MEC/MD, and disposition.

b. Digital photographs of all MEC/MD items encountered.

c. Accounting of all demolition materials used on-site.

HH. Munitions Constituent Sampling Approach

a. Conduct archaeological and biological monitoring to assist in avoidance of sensitive habitats

b. Identify areas where munitions constituents could potentially impact various media.

c. Collect samples to determine concentrations of munitions constituents.

d. Compare analytical results to HDOH EAL and background concentrations.

II. Munitions Constituent Sample Analysis

a. Munition Constituents include:

- Metals (aluminum, antimony, chromium, copper, lead, and zinc)
- Explosives (Tetryl, HMX, RDX, TNB, DNB, TNT, DNT, NT, NG, and PETN)

b. Environmental Media Analyses

c. Background Samples

d. Compare analytical results to HDOH EAL and background concentrations.

JJ. MC Risk Assessment

a. Screening level risk assessment through comparison with State of Hawaii Department of Health Environmental Action Levels and Background Metals Concentrations.

b. If sample results exceed State of Hawaii Department of Health Environmental Action Levels and background concentrations, a baseline human health and ecological risk assessment will be completed.

KK. Next Steps

a. **Remedial Investigation** – Field investigation.

b. **Remedial Investigation Report** – Documents field investigation results, finalizes conceptual site model, and performs hazard assessment.

c. **Feasibility Study** – Develops, screens, and evaluates remedial alternatives.

d. **Proposed Plan** – Provides a brief summary of all alternatives presented in the Feasibility Study and presents the preferred alternative.

1. **Decision Document** – The public will have an opportunity to provide comments to the Proposed Plan during a 30-day public review period.

2. Documents the selected site remedial alternative.

LL. Project Schedule

a. **Final Work Plan – Summer 2013**

b. **RI/FS Field Work – Summer through Fall 2013**

c. **Final RI Report – Summer 2014**

d. **Feasibility Study Report – Winter 2014**

e. **Proposed Plan – Summer 2015**

f. **Decision Document – Winter 2015**

MM. Public Safety

Remember the 3Rs -

a. **RECOGNIZE - Military items can be DANGEROUS!**

b. **RETREAT - DO NOT TOUCH IT! Move away from the area.**

c. **REPORT - Call 911**

NN. Be Involved

Restoration Advisory Board (RAB)

a. Comprised of Representatives from Government and Community

b. Meet Regularly to Review, Evaluate, and Comment on Documents and to Recommend Priorities

c. Currently seeking additional members

OO. Questions

For media queries or general questions about the FUDS Program, contact CEPOH's Public Affairs Office at (808) 835-4002

For project technical questions, please contact CEPOH's Project Manager, Mr. Kevin Pien at (808) 835-4091 or email: Kevin.C.Pien@usace.army.mil

PP. Public Safety

a. **Remember the 3Rs -**

a. **RECOGNIZE - Military items can be DANGEROUS!**

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V. Next Meeting

A. Tentatively Scheduled for Tuesday July 23, 2013.

B. Kevin Pien adjourned the meeting at 8:40 p.m.