

**WAIKANE TRAINING AREA  
RESTORATION ADVISORY BOARD (RAB) MINUTES  
WEDNESDAY, APRIL 25, 2012  
WAHIAHOLE ELEMENTARY SCHOOL CAFETERIA  
48-215 WAIHOLE VALLEY ROAD  
WAIHOLE, ISLAND OF OAHU, HAWAII**

1. MAJ Sally Hannan called the meeting to order at 7:15 p.m. and welcomed everyone.
2. Those in attendance included Government Co-Chair MAJ Sally Hannan, Kevin Pien, Kanalei Shun, and Kim Meacham of U.S. Army Corps of Engineers (USACE); RAB members Community Co-Chair David Henkin, John Adolpho, Todd Cullison, William Keoni Fox, Bryon Ho, Kyle Kajihiro, Karen Maeda, Steven Mow, Bernie Panoncial, Poola Villarimo, Paul Zweng, and Ellwood K. Chung Jr. substituted for Eunice Lehua Pate.

Contractors present included David Wolf of Zapata, Inc., Sonia Shjegstad of Environet, and Kelly Shoji of Wil Chee-Planning, Inc. (WCP).

RAB members absent were Heidimarie Chung, Walea Constantinau, Robert Fernandez, Chris Lopes, Roger Morey, and Laurie Noda.

The agenda of the meeting was:

- I. Welcome and Introductions
- II. Review/Approval of September Meeting Minutes
- III. Overview Draft Final Site Specific Final Report-Removal Action- Construction, Sonia Shjegstad of Environet, Inc.
- IV. Overview of Draft Final Remedial Investigation Report-Remedial Investigation/Feasibility Study, David Wolf of Zapata, Inc.
- V. Next Meeting
- VI. RAB and Community Member Open Discussion

<b>Name</b>	<b>Action Items from 25 April 2012</b>	<b>Suspense Date</b>	<b>Completed</b>
MAJ Hannan	Submit request for use of Waiahole Elementary School Cafeteria for the next RAB meeting.	1 June 2012	
MAJ Hannan	Disseminate the url for recently posted documents, specifically the INPR and Draft Final RI Report.	30 April 2012	Completed 4/27/12
David Wolf and MAJ Hannan	Correct map to clearly distinguish between 0 and higher level concentrations. Distribute the corrected map via email and provide hard copies at next RAB.	30 April 2012	Completed 4/29/12

- I. Welcome and Introductions
- II. Review/Approval of September Meeting Minutes. The meeting was delayed awaiting attendees to arrive (quorum). This item was delayed until later in the meeting for action. Mr. Henkin confirmed that a quorum was not needed for action on the minutes.
- III. Overview Draft Final Site Specific Final Report-Removal Action-Construction by Sonia Shjegstad of Environet, Inc.
  - A. Progress Update
    - a. Surveying: 100 percent complete
    - b. UXO Sweeps: 100 percent complete
    - c. Fieldwork: 100 percent complete
    - d. Draft Report: Submitted and reviewed by USACE
    - e. Draft Final Report: Submitted and under review by USACE
    - f. Final Report: Anticipated submittal June 2012
  - B. Summary of Grid Data
    - a. Munitions and Explosives of Concern (MEC) Quantity: 42 items-Nine items initially categorized as MEC were re-categorized as munitions debris
    - b. Anomalies Removed (pounds): 41,433
    - c. MEC Debris (pounds): 1,638
    - d. Non-MEC Debris (pounds): 15,865
  - C. Photo Documentation of MEC Items
  - D. Summary of Munitions Found
  - E. Mapping of MEC Items
  - F. Final Report
    - a. Background and Objectives
    - b. Technical Approach and Work Plan
    - c. Procedures Followed, Equipment Used
    - d. Summary of Findings:
      - i. MEC Items
      - ii. Munitions Debris (MD)
      - iii. Other Metal Debris
    - e. Maps and Photographs
    - f. Assessment of Quality

David Henkin: Did the reclassification of the nine items from MEC to MD affect the theory of distribution?

Sonia Shjegstad: Somewhat. The single MEC item from the Southern Impact Region Munition Response Site (MRS) was reclassified to MD so no MEC items were found in that MRS during the removal action. However, the relative concentration of MEC was still focused on the Southeastern Region MRS.

Paul Zweng: The Removal Action report was scheduled to be released much earlier. What was the reason for the delay?

Sonia Shjegstad: The delay was technical/administrative, related to the extra effort required to account for the reclassification of those items.

IV. Overview DRAFT FINAL Remedial Investigation (RI) Report-Remedial Investigation/Feasibility Study (RI/FS) by David Wolf of Zapata, Incorporated (ZAPATA).

A. FUDS Program

- a. Congress established the Formerly Used Defense Sites (FUDS) Program in 1986.
- b. US Army Corps of Engineers manages the FUDS Program for Department of Defense (DoD).
- c. The Corps of Engineers Honolulu District manages FUDS projects including the former Waikane Training Area.

B. FUDS Program Development

- a. Formerly Used Defense Sites
  - i. *FUDS are properties that were formerly owned, leased, possessed by, or otherwise under the operational control of the DoD or military prior to October 1986.*

C. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Process

D. Goals of CERCLA

- a. Protect Human Health and Welfare
- b. Protect and Preserve the Environment
- c. Manage Risk

E. Waikane Training Area

- a. Three MRS Sites
  - i. Western Mountainous Region MRS
  - ii. Southern Impact Region MRS
  - iii. Southeastern Region MRS

F. RI Objective

- a. Define the nature and extent of Munitions and Explosives of Concern(MEC) and Munitions Constituents (MC) Contamination

G. Brush Clearing

- a. Transects and grids were cleared of vegetation to facilitate intrusive operations
- b. Biological and archeological escorts

H. Surveying

- a. Navigation and intrusive results for transects and grids were recorded with GPS survey instrumentation

I. Intrusive Investigation

- a. UXO Technician II-Detects metal using a metal detector
- b. UXO Technician I-Excavates metal using a shovel
- c. UXO Technician III-Records intrusive results

J. Remedial Investigation

K. Intrusive Investigation Summary

- a. Munitions Debris (MD):
  - i. Fragments, shell casings, fins, etc. No energetic material and is non-hazardous
  - ii. Identifiable munitions debris included 60mm mortar, AP-trip flare, 81mm mortar. Non-hazardous.
  - iii. Three, 3.5-inch rocket shrouds in Waikane Stream
  - iv. Small arms ammunition (60% of MD) to mainland for shredding and smelting
- b. Non-MD:
  - i. Miscellaneous auto parts, trash, metal debris, fence posts, etc.

L. Munitions Constituent (MC) Sampling

- a. MC are chemicals (metals and explosives) found in munitions items
- b. Collected samples within MRSs and from background location
- c. Samples collected from Removal Action Areas (AOC #1 and AOC #2)
- d. Incremental sample methodology for surface soil
- e. Discrete subsurface soil and sediment samples were collected

M. Munition Constituents Sampling and Analysis

- a. Soil samples were collected, handled and prepared in accordance with State of Hawaii, Department of Health, Hazard Evaluation and Emergency Response, Interim Final Guidance on Incremental Soil Sampling dated November 2009

- b. Samples were analyzed for metals (lead and copper) and explosives (including PETN and nitroglycerine)

N. MC Sample Locations

- a. Samples collected outside project boundary to establish background concentrations for metals
- b. Target Areas (i.e., AOC #1 and AOC #2)
- c. Samples collected in areas of relatively high munitions debris density based on results of the intrusive investigation

O. Munition Constituents (MC) Results

- a. Analytical results were compared against published Hawaii Department of Health (HDOH) Environmental Action Levels (EALs) and EPA residential Regional Screening Levels (RSLs).
  - i. No MC exceedances in sediment
  - ii. Results of the soil screening indicate that copper, lead, breakdown products of TNT (2-amino-4,6-dinitrotoluene and 4-amino-4,6-dinitrotoluene) and nitroglycerine exceeded screening criteria in several individual samples
    - 1. Initiated Risk Assessment evaluation (discussed later in presentation)

P. Remedial Investigation Report

- a. Remedial Investigation
- b. Risk Assessment
  - i. MEC Hazard Assessment
    - 1. Qualitative measure of an explosive hazard to human receptors
  - ii. Human Health Risk
    - 1. Evaluates potential risk to human health presented by munitions constituents
  - iii. Ecological Risk
    - 1. Evaluates potential risk to the environment presented by munitions constituents

Q. MEC Hazard Assessment (MEC HA)

- a. Assesses acute MEC explosive hazards
- b. MEC HA has three components of potential hazards
  - i. Severity
  - ii. Accessibility

- iii. Sensitivity
- c. Hazard Levels range from “1” to “4”
  - i. 1-Highest potential explosive hazard conditions
  - ii. 2-High potential explosive hazard conditions
  - iii. 3-Moderate potential explosive hazard conditions
  - iv. 4-Low potential explosive hazard conditions
- R. MEC Hazard Assessment Results
  - a. MEC HA not conducted in Western/Mountainous Region MRS
    - i. No MEC identified during previous investigations
    - ii. Very rugged terrain, dense vegetation and limited potential for future development
  - b. Baseline condition is “post removal action” in the Southern Impact Region and Southeastern Region MRSs
  - c. MEC HA hazard level “4” identifies low potential explosive hazard conditions in Southern Impact Region MRS and Southeastern Region MRS
  - d. MEC may still pose a hazard in all MRSs
- S. Human Health and Ecological Risk Assessment Results
  - a. Detected MC concentrations in soils were limited to the Southeastern Region MRS in a localized area within removal are AOC #2
  - b. Relatively low magnitude of exceedances
  - c. Negligible risk potential to human health or ecological receptors from MC exposure in soil
- T. Summary of Results-MC
  - a. Some sample results exceeded screening levels in soil
  - b. Risk assessment indicated negligible risk to human health and ecological receptors
  - c. No further action will be required to address MC
- U. Summary of Results-MEC Western/Mountainous Region MRS
  - a. No MEC found during previous investigations
  - b. There is no evidence of concentrated munitions use within the MRS
  - c. A complete MEC exposure pathway (i.e., MEC source, receptor, and receptor acting upon MEC item) is unlikely
  - d. Proceed to Feasibility Study (FS) phase for MEC
- V. Summary of Results-MEC Southern Impact Region and Southeastern Region MRS
  - a. No MEC found during RI

- b. No additional impact areas were identified in the MRSs
- c. Areas characterized with relatively high MD density may contain MEC
- d. Proceed to FS phase for MEC

W. What Happens Next (Tentative schedule)?

- a. RI Report
  - i. Final: May 2012
- b. FS Report
  - i. Analyze remediation alternatives
  - ii. Draft-Final: September 2012
  - iii. Final: October 2012
- c. Proposed Plan
  - i. Public Meeting
  - ii. 30 day Public Review
  - iii. Final: November 2012
- d. Decision Document
  - i. Final: December 2012

X. Safety (3Rs of UXO Safety)

- a. Recognize
  - i. Military Items can be DANGEROUS
- b. Retreat
  - i. DO NOT TOUCH IT! Move away from the area
- c. Report
  - i. CALL 911

Poola Villarimo: Did the samples taken outside the boundary of the training area contain explosive munition constituents?

David Wolf response: No. There were only metals detected.

David Henkin: Comment made on the hard copy of the map given. The map shows the zero and high concentrated areas are in white and light grey. The colors are hard to distinguish between each other. Can it be changed to other colors that clearly show the high versus low concentrations?

David Wolf response: Yes. We can update the legend and provide new copies of the map that more clearly show the contrast in these areas.

David Henkin: Why is there a discrepancy with the acreage of the USMC parcel in the Draft Final, 187 acres versus 199 acres?

Sonia Shjegstad: We are in the process of correcting the acreages to the correct numbers, 1061, 933, and 187.

MAJ Hannan response: Discrepancies in the acreages have been noted. During the EECA, it was determined that there was a need to continue analysis outside of the 874 acre FUDS boundary. This increased the project acreage to 933 acres. The 199 acres reference for the USMC parcel is inaccurate and is being corrected to reflect the accurate acreage of 187 acres.

Kyle Kajihiro: How steep were the grade of transects?

David Wolf response: Work was generally executed at a slope of 30 degrees or less. This is an industry standard for worker safety

David Henkin: How conservative, or what was the definition of conservative for the screening levels? Did you take into consideration "kids eating dirt"?

David Wolf: The EPA regional screening levels for residential soil were used during the risk assessment and are considered more conservative than the EPA commercial/industrial regional screening levels.

David Henkin: Are we proceeding with only a concern with MEC and not MC?

David Wolf: Yes.

Poola Villarimo: Did the sample exceedances trigger the risk assessment?

David Wolf: Yes.

MAJ Hannan: To clarify, the risk assessment is already included as part of the Remedial Investigation Report.

David Henkin: Just a reminder that hard copies of the Remedial Investigation report are available in the repositories, and online except for the certain appendices that were too big to post online.

MAJ Hannan: Yes. Appendix H and the Appendix that includes GIS data are very large due and require special software to view. It is available on disc at the repositories for those interested. Please remember that the end of the comment period is 30 April 2012.

Paul Zweng: Is it possible to get the actual URL to the webpage where the documents are posted online?

MAJ Hannan: Yes. We will email that out to the RAB.

#### V. Next Meeting

- A. Scheduled for September 19th. The third Wednesday in September.

#### VI. RAB and Community Member Open Discussion

- A. David Henkin mentioned this was MAJ Hannan's last meeting and Kevin Pien of the Corps will take over for her.
- B. David Henkin adjourned the meeting at 08:05 p.m.