

**WAIKANE TRAINING AREA  
RESTORATION ADVISORY BOARD (RAB) MINUTES  
WEDNESDAY, SEPTEMBER 28, 2011  
WAIAHOLE ELEMENTARY SCHOOL CAFETERIA  
48-215 WAIAHOLE VALLEY ROAD  
WAIAHOLE, ISLAND OF OAHU, HAWAII**

1. Mr. David Henkin called the meeting to order at 7:05 p.m. and welcomed everyone.
2. Those in attendance included Government Co-Chair MAJ Sally Hannan and Kevin Pien of U.S. Army Corps of Engineers (USACE); RAB members Community Co-Chair David Henkin, Todd Cullison, William Keoni Fox, Byron Ho, Kyle Kajihiro, Karen Maeda, Roger Morey, Steven Mow, Laurie Noda, Eunice Lehua Pate, Poola Villarimo, and Paul Zweng.

Contractors present included David Wolf of Zapata, Inc., Sonia Garcia of Environet, and Clayton Sugimoto of Wil Chee-Planning, Inc. (WCP).

RAB members absent were John Adolpho, Heidimarie Chung, Walea Constantinau, Robert Fernandez, Chris Lopes, and Bernie Panoncial.

The agenda of the meeting was:

- I. Welcome and Introductions
- II. Review/Approval of June and July Meeting Minutes
- III. Project Update – Remedial Investigation/Feasibility Study (RI/FS), David Wolf of Zapata, Inc.
- IV. Project Update – Removal Action-Construction, Sonia Garcia of Environet, Inc.
- V. Feedback on Second Site Visit
- VI. Next Meeting
- VII. RAB and Community Member Open Discussion
- VIII. Adjournment

Name	Action Items from 28 September 2011	Suspense Date	Completed
MAJ Hannan	Check on military historical records of Waikane Valley and the availability of these records, if any, to the public.		
MAJ Hannan	Submit request for use of Waiahole Elementary School Cafeteria for the next RAB meeting.		
MAJ Hannan	Continue to mail items to Heidimarie Chung, Poola Villarimo, and Kyle Kajihiro and other RAB members who were absent.		

- I. Welcome and Introductions
- II. Review/Approval of June and July Meeting Minutes
  - Amended June and July meeting minutes approved unanimously by RAB members
- III. Project Update – Remedial Investigation (RI) / Feasibility Study (FS) by David Wolf of Zapata, Inc. RI will characterize the nature and extent of munitions constituents (MC) and munitions and explosives of concern (MEC) items. The RI/FS was not a Removal Action (RA), such as surface clearance, or subsurface clearance. These are alternatives that are supported by the RI data and subsequent FS.
  - A. Goals of the RI/FS
    - Protect Human Health and Welfare
    - Protect and Preserve the Environment
    - Manage Risk
  - B. RI/FS Objective and Methodology
    - Define the Nature and Extent of MEC Contamination
  - C. RI Fieldwork Progress
    - Southeastern/Southern Impact Region Munitions Response Site (MRS) Transects: 5.75 acres completed = 100% complete
    - Southeastern/Southern Impact Region MRS Grids: 0.82 acres completed = 100% complete
    - Expansion Area Stream Transects: 0.73 acres completed = 100% complete
  - D. Environmental MC Sampling
    - Collected soil and sediment samples from Western/Mountainous Region. No MEC intrusive data was collected.
    - Samples collected from Removal Action Areas
    - 40 Discrete subsurface (12" below ground surface [bgs]) soil samples
    - 24 decision units (DUs) for incremental soil samples
    - 20 Sediment Samples (12" bgs)
    - Laboratory Analysis for Metals (lead [Pb] and copper [Cu]) and Explosives (pentaerythritol tetranitrate [PETN] and nitroglycerin [NG])
    - Results pending data validation
  - E. RI MEC Intrusive Investigation Summary
    - Intrusively investigated 5,347 anomalies:

- There were no MEC or unexploded ordnance anomalies identified
- 1,114 anomalies were munitions debris
- Approximately 1,800 cultural debris, such as trash and cans, were identified
- 127 anomalies were geologic responses
- 2,293 small arms were identified
- Munitions Debris (MD):
  - Fragments, shell casings, fins, etc. No energetic material were identified and all were non-hazardous
  - Three shaped munitions debris items (60mm mortar, AP-Trip Flare, 81mm mortar). Also considered non-hazardous
  - Three 3.5 rocket shrouds were located in Waikane stream
  - Approximately 100 lbs of material documented as safe (MDAS) shipped to mainland for shedding and smelting
- Non-MD:
  - Misc. auto parts, trash, metal debris, fence posts, etc.
- Approximately 43% of all the anomalies were small arms

#### F. MD Extrapolation Analysis

- 56 grids were placed in locations where additional intrusive investigations were warranted (i.e., Zapata utilized the transect data and intrusive results and put it into a GIS software program. Data were gridded and contoured. Results suggested locations where elevated MD concentrations may be located)

#### G. Remedial Investigation Report

- Remedial Investigation
  - The 1<sup>st</sup> part will detail how the work was done and the findings of the investigation
- Risk Assessment
  - The 2<sup>nd</sup> part will assess risk, specifically:
    - MEC Risk
      - Evaluates Risk to Humans Presented by Munitions
    - Human Health Risk
      - Evaluates Risk to Human Health Presented by Munitions Constituents
    - Ecological Risk

- Evaluates Risk to the Environment Presented by Munitions Constituents

#### H. What Happens Next?

- Laboratory Analysis- In Progress
- Data Validation- In Progress
- RI Report (Tentative schedule)
  - Draft: November 2011
  - Final: February 2012
- FS Report (Tentative schedule)
  - Analyze remediation alternatives
  - Draft: 21 January 2012
  - Final: 11 April 2012
- Proposed Plan (Tentative schedule)
  - Public Meeting
  - 30 day Public Review
  - Final: August 2012
- Decision Document (Tentative schedule)
  - Final: September 2012

Poola Villarimo: Was the investigation in the stream part of the study or was it after the fact?  
David Wolf response: It was included in the study. Transects were inadvertently left off the slides.

Todd Cullison: Was the spatial analysis a topographical survey where you can find more ammunitions based on the topography? David Wolf response: Data was collected on 100-foot segments of each of the transects. The intrusive work was conducted. The number of anomalies were tallied up and then reported as MD or cultural debris. Each 100-foot segment becomes a point. It goes through a gridding process. It is not a topographic but a contour map. It is a gridding process and is not related to the topography.

Paul Zweng: Can a preliminary conclusion be made that since there were no MEC found in the 5,347 anomalies identified, that in terms of someone walking on the property, is it unlikely for them to come across MEC? David Wolf response: There will always be a possibility for MEC items.

Kyle Kajihiro: What percentage of the land screened is of the total area? David Wolf response: He can't recall the percentage. A total of less than 8 acres surveyed. Paul Zweng: What is the distance between transects? David Wolf response: 75 feet is the distance between transects. Paul Zweng: What is the width of the survey? David Wolf response: Approximately 1 meter. Paul

Zweng: Since 75 feet is approximately 25 meters, then 1/25 of the area has been surveyed, so approximately 4%.

David Henkin: Will the figures identifying work completed in the streams be included in the report? David Wolf response: Yes.

David Henkin: You previously mentioned there were no MEC found but there were motor fins, rockets, etc. found; does this suggest there were unexploded ordnance in the area? David Wolf response: All items were classified as munitions debris. Shape MD did not contain energetic material. David Henkin: In the report, will you distinguish between military munitions and hunter munitions? David Wolf response: Yes. David Henkin: Regarding ammunition with military origins; will there be any report to locate those areas where there is a high concentration? David Wolf response: Yes, those will be documented.

David Henkin: Would shrouds be left where you fired it? MAJ Sally Hannan response: There is typically a distance that the shrouds come off from the firing point. I cannot confirm the exact distance.

Laurie Noda: What constitutes small arms? David Wolf response: Small arms are defined as 0.5-caliber or smaller.

Kyle Kajihiro: Are you going to go back to expand the radius to make sure there is nothing more? MAJ Sally Hannan response: Results of the Remedial Investigation will determine the risk and help us in determining if further action is required.

David Henkin: The RI is not intended to cover 100 percent of the area. The FS study will take it further.

David Henkin: Was the work done just a surface sweep? David Wolf response: No. There was intrusive work done. The instruments being utilized were capable of detecting subsurface anomalies and intrusive investigations were conducted if anomalies were identified.

David Henkin: The Marine RAB was held last week. Interesting facts in their investigation; most of the MEC that was found were on the surface and they found one that was one inch below the surface. Did you find anomalies on the surface or in depth? David Wolf response: There were some on the surface and at depth. Most of the items were found within 18 inches of the surface.

Byron Ho: Think about how much public access there is in this area. There may be issues with samples that were found because items may have been disturbed.

MAJ Sally Hannan: Our next briefer will be Sonia Garcia with Environet to provide an update on the Removal Action. However, before she begins, I would like to clarify a few items from our last meeting. First, the Mine Lab clears to a depth of 24 inches or 2 feet. The 3-foot depth clearance that was mentioned at the last RAB meeting refers to the EM 61, a large piece of equipment. It is difficult to use the EM-61 in Waikane. Every part of the survey area was hand swept to a depth of 2 feet.

Also, I quoted that 24,000 lbs of cultural debris had been found in Waikane during our last RAB meeting. However, I confused this number with the total number of anomalies. Approximately 16,000 lbs of cultural debris was found in Waikane during the Removal Action.

#### IV. Project Update – Munitions and Explosives of Concern Removal Action by Sonia Garcia of Environet

A. Progress Update

- Surveying: 100% Complete
- UXO Sweep: 100% Complete
- Final Digs and Fieldwork Closeout: 100%
- Anticipated Completion Timeframe
  - Submittal of final report: End September 2011

B. Summary of Grid Data

- MEC Quantity-51 items found
- Inert MEC Quantity-0 items found
- Small Arms-0 items found
- MEC Debris-1,600 pounds
- Non-MEC Debris-16,000 pounds
- Anomalies found over 39,000

C. Photo documentation of MEC Items

- Write down the grid the MEC item was found in and the geographic coordinates. Each MEC is given an ID number and description. All photos are kept and included in the report.

D. Summary of Munitions Found

E. Mapping of MEC Items

F. Final Report

- Background and Objectives
- Technical Approach and Work Plan
- Procedures Followed, Equipment Used
- Summary of Findings:
  - MEC Items
  - Munitions Debris
  - Metal Debris
- Maps and Photographs
- Assessment of Quality

Kyle Kajihiro: Do you know where the firing points were? Sonia Garcia response: We did not identify a specific location. It is hard to tell where the military was firing from. At best we were able to tell where the most concentrated area of items found.

David Henkin: Two areas of concern were determined by the EE/CA. Does this suggest there is a lot of MEC out there? Sonia Garcia response: EE/CA data identified the two areas had a large concentration. We are doing a 100% clearance of those two areas. Zapata is doing a transect sweep of the area which is not a 100 percent sweep of the area. That is why the risk assessment is going to be done.

MAJ Sally Hannan: The past studies (i.e., Site Investigation and EE/CA) determined actions were needed. High concentrations were found in two areas and the removal action focused on public health and safety. The remaining areas were investigated to find if there is a need for additional work.

Paul Zweng: In the 1<sup>st</sup> presentation, a lot of small arms were found. In your presentation, there is no reference to small arms. Sonia Garcia response: The definition of small arms in the removal action was the same definition as the RI but, we did not focus on the small arms. Small arms were lumped into the non-MEC category and not part of the removal action.

Kyle Kajihiro: Determinations were made close to the edge of Environet project area. How does that factor into Zapata's investigation? MAJ Sally Hannan response: If anomalies were found in transects then Zapata placed 25-foot x 25-foot grids around selected areas to investigate further (i.e., 100 percent investigation of the grid area). No MEC items were discovered in any of the grids.

Paul Zweng: Is there any documentation on historic activities of the area? MAJ Sally Hannan response: There are historical records that are used to justify if the area falls into the FUDS program. I will have to check if there is publication of the historical records. Sonia Garcia response: A brief summary of the history will be incorporated into the report. Steven Mow response: An Inventory Project Report (INPR) is done for every FUDS project. The report will include the information that you are looking for. The report is available to the public.

Todd Cullison: Are there topography issues and historical records of where the ammunitions are found? Steven Mow response: By looking at the topography you could surmise what type of activity the area was used for.

Poola Villarimo: Did your study allow you to suggest land use controls? Sonia Garcia response: Our study was purely a removal action. David Henkin response: The Feasibility Study will address those issues.

Kyle Kajihiro: Will the Feasibility Study include these two areas in the land use controls? David Henkin response: Yes.

Steven Mow: The Feasibility Study for the Marine Corps property is out. Recommend you go to the Marine Corps website to look at the report. Mr. Mow also suggested that recommendations from this FS be consistent with the Marine Corps FS.

David Henkin: The Feasibility Study is open for public comment until October 21, 2011. It is available on the Marine Corps website, Key Project, and Kaneohe Public Library. The Feasibility Study suggests to move the fence line north of the stream and to give the land back to the families. Marine Corps RAB meeting tentatively scheduled in January for the finalization of the report.

MAJ Sally Hannan: If you haven't already signed the RAB Charter, please sign.

V. Feedback on Second Site Visit

- Roger Morey: Impressed with the work that was done given the harsh working conditions in Waikane. Depressed to see how much junk has been left out there. If another opportunity arises, you should see it.
- Lehua Pate: The experience was awesome. Visiting the lo'i, you could imagine the village and the people living there.
- Todd Cullison: The City and County property has been cleared. Made a comment on sediment and erosion control and was disappointed that it was left in that condition. It was an educational trip.

VI. Next RAB Meeting

Wednesday, 16 November 2011, 7 p.m., Waiahole Elementary School Cafeteria, pending the availability of the RI report.

VII. RAB and Community Member Open Discussion

- Byron Ho: If you have an opportunity please review the Feasibility Study. Review the scoring to help to understand the RI report.
- David Henkin: If you have questions of the Marine Corps Feasibility Study please feel free to contact me.
- MAJ Sally Hannan: Is there a preference to continue to mail hard copies of items? Continue mailing items to Heidimarie Chung, Poola Villarimo, and Kyle Kajihiro. Will continue to mail items to those absent from the meeting.

VIII. Adjournment

There being no further business, David Henkin adjourned the meeting at 8:30 p.m.