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**ANDERSEN RESTORATION ADVISORY BOARD MEETING MINUTES, APRIL 5,
2017**

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**RESTORATION ADVISORY BOARD MEETING
SANTA ROSA/SANTA RITA ROOM, HYATT HOTEL, TUMON, GUAM
APRIL 5, 2017
MEETING MINUTES**

The meeting started at 6:46 PM with a total of 27 participants (see Appendix 1). Introduction and recognition of participants were given by Mr. Gregg Ikehara, Restoration Program Manager at Andersen Air Force Base. Mr. Ikehara briefly introduced Community Co-chairman John Jocson, and acting Installation Co-chair Lieutenant Colonel Pete Johnson of the 36th Wing at Andersen AFB, who gave some opening welcome remarks. Mr. Ikehara acknowledged the presence of attendees from the different agencies: USEPA, GEPA, and NAVFACPAC and thanked all for their time to attend the RAB meeting.

Mr. Ikehara introduced his co-presenters for the evening's meeting, Mr. Richard Hosokawa, Munitions Response Program Manager, and Mr. Lance Higa, Remedial Project Manager. Both work for NAVFAC Pacific in Hawaii.

6:48 PM

Presentation 1 by Gregg Ikehara

The RAB meeting tonight presents findings for both the IRP and MRP sites at Andersen AFB. The Environmental Restoration Program at Andersen is a CERCLA clean-up program. There are 66 of the 80 IRP sites with no further action status and two Installation Restoration (IR) clean-up sites, which were contractually delayed. However, there is one ongoing "compliance cleanup" study site (Site 80 Potts Junction), 11 long-term management sites, and 10 Munitions Response Program (MRP) sites in the study phase. For the IR sites, 83% have remedy in place status, 2% with current clean-up, 1% current studies, and 14% long-term monitoring.

Andersen AFB has been on the National Priorities List since 1992. The DOD is working closely with EPA and GEPA to achieve the cleanup of all identified sites. A Federal Facility Agreement was developed and signed by the three parties in 1993, because of identified impacts on the ground water of northern Guam. This has resulted in the extensive monitoring of groundwater for the past two decades. The site remediation is done utilizing a risk based clean-up approach, which addresses the direct impacts on human health and ecological receptors.

The latest Site 79 remedial action was successfully completed. Complete cleanup of the site at Northwest Field went relatively easily with no treatment required for contaminants of concern. That site is located near one of the few hunting areas remaining on Andersen.

Guam's drinking water in the northern Guam aquifer is a fresh water lens that floats on the underlying denser sea water. This configuration results in a lenticular shape convex on both top and bottom. Presenting some of the results from the Fall 2016 sampling event, the ground water in the base landfill complex shows no exceedances. For the ground water at the Main Base sampling results, the focus is on a plume related to the aircraft maintenance area at IRP Site 54a, where monitoring wells are aligned with the suspected source of contaminants towards the eastern shore. For trends in historical main base groundwater data, the variation of concentrations in the deep sections of the lens is a result of rainfall, causing lens thickness

variation. Historical TCE/PCE use has been replaced by more environmentally friendly substances. In the MARBO annex, we are closely monitoring deep well IRP-31 for PCE and TCE. Groundwater sampling has been conducted for over 20 years with TCE concentrations being tracked since 1996. Variability in data collected at the base of the fresh water lens is continuously monitored and is also attributed to the lens thickening and thinning. The Spring sampling is ready to get started within the next month.

7:02

Q&A portion

Q1: What is site 80?

- It was a field constructed tank farm for aircraft fuel. The Remedial Investigation should be awarded in the next couple of months. We'll see how the investigation goes before determination of a cleanup.

Q2: Any foreseeable circumstances impacting residents adjacent to the site?

- Hopefully not at present. Most of the focus will be on the soil that remains on the tank farm site. We are not anticipating any funding impacts from proposed budget cuts and that we can get to completion for the study and clean-up actions as planned.

Q3: You mentioned the TCE chemical levels at MARBO. Is it at the transition zone?

- Yes, we are looking at dissolved concentrations within the transition zone at the bottom of the fresh water lens. The hydrostatic conditions at the bottom of the lens is not allowing the TCE to disperse or migrate readily, so the conditions are somewhat static. The variability that we observe in the transition zone is due to the variation of the lens thickness as indicated by the chloride variations as shown in the time-series graph. The rainfall quantities affect both the water levels as well as the thickness of the lens.

7:07 PM

Presentation 2 by Richard Hosokawa

UXO 2A Grenade Range: the Remedial Investigation and Feasibility Study started in 2014 through 2017. Munitions of concern at the site are practice 40 mm grenades. Currently we are re-assessing alternatives for cleanup, and preparing a Proposed Plan.

UXO 3A Dumped Munitions Contaminated Area: The Remedial Investigation fieldwork was completed in 2016. The Remedial Investigation identified and delineated fuzes disposed and burned in this former ordnance burn and detonation area. The Munitions Response Prioritization Protocol rank has changed from 4 to 3, which became higher due to Remedial Investigation findings. The munitions types found at this site were incendiary bombs and fuzes.

UXO 4A EOD Disposal Range: The Time Critical Removal Action was completed in in 2015. There were high explosives from fuzes as the fuze shells were rusting away. The Remedial Investigation started in 2016 and planned for completion in 2017. We are currently working on the pre-draft Feasibility Study and assessing alternatives. There is a military construction project being planned that is being coordinated with the Munitions Response Program.

UXO 5A Former Burn and Dump Site: The Remedial Investigation fieldwork was completed in 2015. Ordnance Burn and Ordnance Detonation areas were identified and delineated. The

Munitions and Explosive of Concern types found were incendiary bombs, practice bombs, and fuzes. We are currently working on the Remedial Investigation report.

UXO 7A Cliff Dump Site: We are into the early stages of planning documents; establishing methods on how to study the site such as scoping worksheet preparation for agency review.

UXO 11A UXO Burn and Dump: The fieldwork was postponed to address site-related issues. Glass from chemical agent identification set training kits was discovered. The Remedial Investigation Work Plan requires amendment. The fieldwork will be conducted in 2018.

UXO 16A Landfill 13: The former Installation Restoration site identified munitions during site investigation activities. The Remedial Investigation will address potential munitions on the lower slope. Munitions and Explosives of Concern types at this site include 20mm, small arms ammunition, and incendiary munitions. Remedial Investigation planning documents are being prepared.

UXO 17A Skeet Range: The Preliminary Assessment and Site Inspection were performed from 2015 to 2016. Two acres were identified with elevated levels of lead and antimony. A Remedial Investigation was recommended. We are currently working on Remedial Investigation planning documents. No Munitions and Explosives of Concern items were reported.

MRP Timeline: This table is a summary of the Munitions Response Program sites, work in progress, Munitions Response Site Prioritization Protocol rankings (which have changed highlighted in yellow), phase of work, and the year work is planned.

7:14 PM

Q&A Portion

Q1: So the protocol rank changed from 4 to 3 for UXO 3A?

- Yes, it was initially ranked 4 and then changed to 3 due to Remedial Investigation findings. A ranking of 3 is higher than 4.

7:15PM

Presentation 3 by Lance Higa

UXO 5A Former Burn and Dump: Site Preliminary Assessment began in 2007, followed by Site Inspection in 2011 and now in 2017, Remedial Investigation with human and ecological risk assessments is being conducted.

UXO 5A is located on AAFB near the contractor gate and commercial vehicle inspection station. It was used as a bomb depot following WWII and used by the Army to perform open burn disposal of smoke and incendiary bombs. The site is currently unused.

Previous investigations recommended a Remedial Investigation. Previous investigation data and site visits revised the initial boundaries of the site, focusing on the open burn activities. From January to March 2015, field activities conducted included a biological survey, vegetation clearance, MEC investigation, and munitions constituent (MC) soil sampling. MC is the chemical aspect of the munition. The objective of the RI was to define the nature and extent of MEC and MC at the site.

The first thing that the contractors did was to survey the site boundary. No endangered plants were found nor Mariana fruit bats reported. Vegetation clearance of grasses, shrubs, and small trees was done to allow detection equipment use.

The MEC Investigation map shows the activities in 36 grids (yellow cross-hatched). The remaining 26 grids (blue) have high level of metals. Three (3) areas (purple) show trenching evidence. The MEC investigation included establishment of 36 MEC soil sampling grids, limited MEC surface and subsurface clearance, and off-site disposal of certified material.

MEC investigation results show the presence of a hand grenade, incendiary bomblets, and signal flares.

For the subsurface investigation results, no MEC items were identified. Majority of items recovered consisted of carcasses of 100-lb. smoke bombs and 100-lb. practice bombs.

For the RI-MC investigation, all samples were analyzed from the 36 surface and 22 subsurface soil samples collected. Soil samples were analyzed for metals, polynuclear aromatic hydrocarbon (PAH), explosives, pesticides, and PCBs. Dioxins were also analyzed if the soil surface showed evidence of burning. RI-MC investigation results show no detection of pesticide or explosives above screening criteria. PCBs were detected above screening criteria only in DU02. Out of the 36 DUs, 8 were detected with PAHs and 3 out of the 8 soil mounds. Metals were detected in all samples. Dioxins were detected in 3 DUs and all 8 surface mounds. The RI conclusion states that there are no cancer risks on any of the grids. A Feasibility Study is recommended to address MEC items present within the site boundary and potential human health risks due to metals and dioxins.

7:31 PM

Q&A Portion

Q1: What were found in the trenches?

- Mostly construction debris was found; the trenches showed evidence of burning, and materials were piled up.

Q2: For the biological survey from January-March, would the season affect the flora?

- Contractors knew what to look for during surveys so that the seasonality was not a factor when searching for flora.

Q3: What about the fruit bat (fanihi), did the survey take that into account?

- Yes. The survey protocol was done by a bat expert on Guam who has been studying them on Guam for 10 years.

Q4: Is 5A all located in AAFB?

- Yes

Q5: There are other munition sites, but this presentation is only for AAFB. Will there be presentation for the other sites as well?

- Yes, there will be, but there is no schedule yet for non-AAFB sites.

Q6: Can I make a recommendation? If you feel like your questions were not answered, write it on a piece of paper and submit it so that the technical experts can answer it and you'll be able to get the best response.

Q7: Does any presentation focus on demolition of housing on base, including the demolition of houses at South Finegayan? The construction materials, where does it go?

- This RAB meeting only addresses Andersen AFB sites but there are separate RAB meetings to address other DOD installations on Guam. There are permitted landfills where the demolition wastes go. All the hard fills are privately-owned at this point. Demolition contractors are responsible for disposal and have stringent requirements to follow.

7:44 PM

Closing Remarks by Gregg Ikehara

Mr. Ikehara thanked everyone for their participation and acknowledged the presence of Mr. Jess Torres, a now retired, former colleague. The meeting ended at 7:45 PM.

APPENDIX 1. ATTENDANCE SHEET

NAME AFFILIATION TELEPHONE NUMBER

Kris Saboda, Navy	(808) 472-1461
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