



**ANDERSEN AFB  
GUAM**

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**ADMINISTRATIVE RECORD  
COVER SHEET**

AR File Number 432

**ANDERSEN AIR FORCE BASE  
RESTORATION ADVISORY BOARD (RAB)  
MINUTES OF MEETING – 15 April 1999  
Guam Legislative Building, Hagatna, Guam**

**MEMBERS PRESENT:** Col T. McGoldrick – Installation Co-chair  
Sen. J. Brown – Community Co-chair  
Mr. M. Gawel – RAB Member  
Mr. J. Jocson – RAB Member  
Mr. J. Iglesias – RAB Member  
Mr. V. Wuerch – GEPA RAB Member  
Ms. J. Poland – AAFB  
Mr. F. Castro – RAB Member  
Mr. E. Artero – RAB Member  
Mr. J. Flores – RAB Member  
Mr. M. Carey – RAB Member  
Ms. C. Sian-Denton – GWA New RAB Member

**MEMBERS ABSENT:** Ms. J. Duwel – RAB Member  
Mr. F. Damian – RAB Member  
Mayor N. Blas – RAB Member  
Mayor R. Lizama – RAB Member  
Ms. J. Tarkong – RAB Member  
Mr. D. Cruz – RAB Member  
Mr. M. Ripperda – EPA Region IX

**PUBLIC ATTENDEES:** Mr. G. Ikehara – AAFB  
Ms. M. Miclat – AAFB  
Mr. J. Torres – AAFB  
Mr. T. Churan – AAFB  
Maj G. Perkinson – AAFB  
Mr. T. Sheldon – AAFB  
Dr. J. Rosacker – Booz-Allen & Hamilton  
Mr. B. Thomas – EA Pacific  
Mr. L. Richman – EPA  
Ms. M. Torres – Navy Hospital  
Mr. V. J. Pereira – GEPA  
Mr. A. Marquez – GEPA  
Ms. C. Taitano – GEPA  
Mr. N. Custodio – GEPA  
Mr. J. Santo Tomas – PDN  
Mr. E. Mandell – Guam Legislature  
Ms. R. Ellen Perez – Guam Legislature  
Ms. D. Hong Ya – Guam Legislature  
Ms. A. Legaspi – Guam Legislature  
Mr. T. Gumataotao – Guam Legislature

Senator Joanne Brown, Community Co-chair, opened the meeting at 6:40 p.m. by welcoming everyone to the RAB meeting and acknowledging that there are several issues on the agenda that she would like to bring up, specifically additional issues regarding the air stripper unit and the Tumon-Maui well. Ms. Joan Poland mentioned that the air stripper and Tumon-Maui well issues have been added to the agenda.

## **1. REVIEW OF OLD BUSINESS**

Ms. Poland asked RAB members if they had any comments on the minutes from the last RAB meeting in January. There were no comments or revisions to the minutes.

## **2. FIELDWORK UPDATE/PRESENTATION**

### **a. Groundwater**

Mr. Gregg Ikehara thanked everyone present for attending the RAB meeting and discussed the groundwater results for the fall 1998 sampling event. He presented a graph showing the trichloroethene (TCE) results from the past seven sampling events, including the variations in TCE concentrations in IRP-31 groundwater samples. Mr. Ikehara stated that the fall 1998 results from IRP-31 were revised from 330 micrograms per liter ( $\mu\text{g/L}$ ) to 380  $\mu\text{g/L}$ , which still showed a decrease from the spring 1998 sampling event. Dichloroethene, a breakdown product of TCE, was detected in the IRP-31 groundwater sample taken from the fall 1998 sampling event. The breakdown product indicates that TCE degradation is possibly occurring. The Air Force will present the spring 1999 results to the RAB when the data becomes available. The concentrations of TCE in all the other wells in MARBO have remained relatively stable (consistent). The spring 1999 groundwater sampling event had begun the first week of April.

Mr. Fred Castro asked if the Tumon-Maui well is sampled during the groundwater sampling events. Mr. Ikehara stated that the Tumon-Maui well is not a monitoring well and therefore, is not sampled as part of the groundwater-monitoring plan.

### **b. Northwest Field Operable Unit**

Mr. Ikehara discussed the status of IRP sites that include Landfill 22, Ritidian Point Dumpsite, Chemical Storage Area 4, Landfill 21, and Waste Pile 4.

(1) **Landfill 22.** The fieldwork was completed and the analytical results have been reviewed. The preliminary data shows little evidence of landfill-type operations. A No Further Response Action Planned (NFRAP) report is being prepared.

(2) **Ritidian Point Dumpsite.** The site is a cliff-line site located just southwest of the Ritidian Point Wildlife Refuge. Dames & Moore, the new contractor, will initiate field activities in approximately a month. Efforts are currently underway to obtain work clearance and natural resource approvals.

(3) **Chemical Storage Area 4.** The draft Engineering Evaluation/Cost Analysis (EE/CA) report, recommending a minor soil cleanup, has undergone review by EPA and GEPA, and response to comments has been prepared for agency review. The final draft will then go out for public review and comment. A Non-Time Critical Removal Action is scheduled to begin in Fiscal Year 1999 (FY99).

(4) **Landfill 21.** The draft EE/CA report has undergone EPA and GEPA review. The report will be revised and submitted to the agencies as a final EE/CA and will then be available for public review. Removal action will begin in FY99.

(5) **Waste Pile 4.** A draft NFRAP report was submitted to the base for review and is scheduled to be submitted to GEPA and EPA in May.

(6) **Federal Facility Agreement Schedule.** Mr. Ikehara explained that the Federal Facility Agreement (FFA) schedule will have to be revised because of the imminent completion of fieldwork in the Northwest Field Operable Unit (OU) and the proposed removal actions for FY99. Mr. Castro asked about funding for the Northwest Field OU. Mr. Ikehara stated that the Air Force is on track with the budget to assess and clean up Northwest Field.

#### **c. Main Base Operable Unit**

**Overall Status.** Ms. Marriane Miclat stated that there are three new sites which have begun the remedial investigation process, since the last RAB meeting. These sites are Landfill 1, Chemical Storage Area 1, and Landfill 17.

(1) **Landfill 1.** A decision summary document will be prepared for the site with recommendations that it be investigated under Resource Conservation and Recovery Act (RCRA) guidance because the site includes the active base landfill and environmental issues are already being addressed under the RCRA guidelines.

Mr. Castro asked if GEPA would still be involved with Landfill 1 if the site were investigated as a RCRA site. Ms. Poland said that GEPA would be involved with reviewing environmental issues associated with the site. There is a GEPA permit to operate the existing facility and a closure report being prepared in accordance with RCRA guidelines for parts of the landfill property not currently in use. Ms. Poland stated that a cap was placed over part of the former landfill for the vertical expansion project of the current landfill. In a way, explained Ms. Poland, the cap is a remedial action because the historic landfill has been covered. Mr. Churan explained that the current landfill is double-lined and that there is a cap over the older part of the landfill. This serves as a base for the new landfill and includes a leachate removal system.

Mr. Eddie Artero asked how many monitoring wells have been installed to monitor the landfill. Ms. Poland explained that the base has installed numerous wells under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) program to monitor the landfill complex. There are several inactive landfills in the vicinity of the current landfill but the whole area is considered the Landfill complex. Mr. Ikehara believes there are 17 monitoring wells in the vicinity of the Landfill complex.

(2) **Chemical Storage Area 1.** The site is approximately four acres and is located at the end of the main base runways. Fieldwork was completed and the base is waiting for soil sample analytical results. Based on field observations, there is no evidence of hazardous waste stored or disposed of on the site. However, the base is waiting on the analytical results to confirm the field observation.

(3) **Landfill 17.** The site was reportedly used for disposal of sanitary waste, drums, aircraft parts, and construction debris between 1945 and 1949. Dump trucks were reported to have backed up to the cliff line and disposed of waste over the cliff. The site is divided into six areas that total 23 acres, and fieldwork has begun at the site. The site is difficult to investigate due to the steep terrain. Heavy equipment (such as a backhoe) will not be used to investigate the subsurface in areas where the equipment may be a safety hazard for the workers. The field investigation includes records search, detailed site inventory, geophysical survey (wherever possible), and surface soil sampling. The records search and initial site reconnaissance indicate that a section of Parcel B was used for a gunnery range. An earthen mound was used as a backstop small caliber munitions. Field personnel observed metal slugs (bullets) in the earthen berm. It may be that the earthen berm contains lead from the bullets. Field personnel will collect soil samples from the berm.

Sen. Brown asked how the base would adequately assess landfill 17 if heavy equipment were not used at the site. Ms. Miclat explained that while there are limiting factors as a result of difficult access the site would be fully assessed by the contractors. Sen. Brown asked what materials were disposed of at the site and inquired if the site is currently being investigated. Ms. Miclat said that much of the materials, to date, look like construction debris/typhoon-damaged materials pushed over the cliff line. Ms. Poland said that the site is currently under investigation and the field investigation should be completed in approximately six weeks.

Mr. Castro asked about funds to complete the work at Landfill 17 and whether funding shortfalls will impact future work. Ms. Poland explained that so far Andersen AFB has been able to obtain all funds requested from PACAF and PACAF has been very supportive of the IRP. For FY99, the Andersen AFB IRP has received over \$3 million to complete studies and cleanup activities. The proposed budget for FY00 is over \$7 million with most going towards cleanup activities. Ms. Miclat commented that funds are allocated and prioritized to ensure that human health and the environment are protected.

#### **d. MARBO Operable Unit**

**Overall Status.** Mr. Jess Torres stated that the fieldwork at MARBO Annex began in January 1999 and is expected to be complete by the end of June 1999. Long-term groundwater monitoring will begin in October 1999 and, in accordance with the ROD, the base will reevaluate the long-term monitoring plan every two years. The next evaluation period will be in May 2000. Also in the ROD, there is a periodic five-year review of the cleanup sites and the next review for that is scheduled for March 2003. Mr. Torres stated that there are four sites in MARBO undergoing cleanup. These sites include MARBO laundry, Waste Pile 6, Waste Pile 7, and Landfill 29.

At the MARBO laundry, the Air Force is removing soil containing lead and Polychlorinated Biphenyl (PCB). The results of initial confirmation closure samples collected one foot below ground surface indicate that additional soil needs to be removed in order to reach the cleanup goal established in the ROD. The Air Force is concerned that the excavation is too close to the laundry building foundation and that the foundation may be damaged. A structural engineer assessed the foundation and recommended excavating and sampling in 36-foot sections instead of excavating a trench that is the length of the building.

At Waste Pile 6, removal is ongoing for soil and various debris that include batteries, battery casings, and asphalt. Initially, the Air Force believed there were only six battery casings at the site. However, to date the contractor has removed nine 55-gallon drums of battery casing fragments and anticipates removing nine more. Closure samples have been collected at the other hot spots identified and the Air Force is waiting for analytical results.

At Waste Pile 7, the Air Force plans to construct a soil cover over the area. The Air Force has graded the first layer of the cover, which is the six-inch coralline sub-base layer. A 12-inch clay silt confinement layer will be constructed over the sub-base and a six-inch layer of topsoil will then overlie the confinement layer. The Air Force is also working on constructing a drainage basin to prevent storm run-off from accumulating on the soil cover.

Sen. Brown asked what waste materials were found at Waste Pile 7. Mr. Torres stated that scrap metal, construction debris, and soil containing lead were found at the site and that the waste materials will be covered. Sen. Brown stated that this was the site she was concerned about. Ms. Poland stated that with groundwater monitoring and the cleanup alternative, exposure to contaminants at the site would be addressed. Only soil from the site would be covered, unlike the initial plan to consolidate waste from the other MARBO sites, have them dumped at Waste Pile 7 and then applying a soil cover to it. The Air Force will also have an extensive 5-year review of the cleanup alternative in order to ensure that exposure to waste does not occur. The 5-year review will include reevaluation of the cleanup alternative and review of any new technology that might be more beneficial. Sen. Brown asked whether the soil cover is impermeable and if the site would have restricted use. Ms. Poland stated that the soil cover retards the migration of surface water through the subsurface but that the cover is not as restrictive as a landfill cap. The waste pile area would also have restrictive future land use. Approximately two acres of the site would have restrictive use. Mr. Vincent Pereira asked if groundwater monitoring wells downgrade from the cleanup site were sampled. Mr. Torres stated that the Air Force does collect groundwater samples from downgradient monitoring wells.

At Landfill 29, drums, metal debris, and any contaminated soil were excavated. The soil was stockpiled on the site and the Air Force is waiting for analytical results before disposing. Mr. Castro asked about the options for disposal. Mr. Torres explained that pending the analytical results there are two methods for disposal: one, as solid waste to be disposed of at the main base Landfill; or two, as hazardous waste which would be shipped off-island for disposal.

Mr. Narciso Custodio inquired if the soil contaminants at the MARBO sites had impacted groundwater. Mr. Ikehara explained that there are groundwater-monitoring wells within the vicinity of all of the MARBO sites and the base has extensive groundwater data in the MARBO

area. The groundwater data indicates that the contaminants in soil are different from the contaminants in groundwater. Mr. Custodio asked for a copy of the groundwater data for wells near the cleanup sites. Ms. Poland stated that all of the groundwater data as well as the RI/FS reports for the MARBO sites were sent to GEPA.

#### **e. Harmon Annexes Operable Unit**

**Overall Status.** Mr. Torres stated that there are about four weeks of cleanup activities remaining at the sites within the Harmon Annexes OU. These sites include Landfill 24, the Harmon substation, and six Areas of Concern (AOCs). There have been delays in the projected completion date; the contractors were delayed in removing soil at the Harmon substation because of Guam Power Authority's (GPA) efforts to first remove a power pole from the site.

**(1) Harmon Substation.** Additional fieldwork in the "buried drum area" includes excavation of soils and confirmatory sampling to ensure thorough cleanup of the soil. Plans to temporarily move a GPA utility power pole, which is located within the "miscellaneous container area", are being coordinated with GPA so that the removal action can be completed. Mr. Castro asked if there were any more problems with trespassing and illegal disposal of waste. Mr. Torres indicated that there have not been any reported incidences since the time when unknown drums were found on the site.

**(2) Landfill 24.** Additional fieldwork includes a lead antimony hot spot that needs to be removed from Parcel C.

After completing the fieldwork, removal action closure reports for each site, an RI/FS, Proposed Plan (PP), and ROD for the Harmon Annexes OU will be prepared. Ms. Poland stated that the Air Force would ask for an accelerated review of these documents so that these sites can be included with the Harmon Annex excess lands to be transferred to GovGuam under Public Law 103-339. Mr. Tom Sheldon stated that with the concurrence of GEPA, EPA could allow a partial deletion of a portion of that National Priorities List site if the removal action was completed.

### **3. NEW RAB MEMBERSHIP**

Ms. Miclat discussed efforts to recruit new RAB members. Currently, there are five to six vacancies on the Board. The Air Force ran a three-day advertisement for RAB member positions and received two responses. Ms. Miclat stated that she has held off updating the RAB Charter document until new members are recruited. She has also prepared appreciation letters and certificates for the former RAB members who have recently resigned and will provide the letters and certificates to Sen. Brown for her signature. Ms. Miclat spoke with the Air Force communications media group/public affairs about using Armed Forces Television (ATV) to announce upcoming meetings and publish any articles regarding the IRP. The Air Force Public Affairs office is amenable to allowing space or air time for these announcements.

Sen. Brown stated that Carmen Sian-Denton, who is with the Guam Waterworks Authority (GWA), has volunteered to be a RAB member. Sen. Brown also spoke with Guam Economic Development Authority (GEDA) to see if anyone from that agency might be interested in

becoming a RAB member and Conchita Taitano was nominated. However, in a May 12 phone conversation with Ms. Miclat, Ms. Taitano expressed that she would be unable to fulfill the time commitment required as a RAB member. Ms. Miclat stated that the RAB member from the Soroptomist International club, Charlotte Dimarucut, has resigned and that the club could not maintain a member being on the Board. Sen. Brown recommended that the Mayor of Mangilao, Mayor Nito Blas, and Mr. Daniel Cruz both be contacted to inquire about their status as RAB members. Mr. Castro brought up the idea of having students as RAB members. Others on the RAB were not in agreement with this idea. Sen. Brown and Colonel McGoldrick both agreed that it would be a good idea to have them as attendees; however, they believed that students might not be ready to represent the public's interest.

#### 4. AIR STRIPPER

Mr. Churan discussed the air stripper unit used for wellhead treatment for the Tumon-Maui well. The stripper was used to remove volatile organic compounds (VOCs) from the Tumon-Maui and MW-2 wells. The air stripper is currently not in service due to scaling (calcium carbonate precipitate) that fouled the air stripping balls and pumps. Mr. Churan stated that the base's water supply demand has decreased in the last year due to water conservation efforts and repairs to leaking water lines. As a result, the base does not currently use the Tumon-Maui and MW-2 wells.

Mr. Churan stated that tetrachloroethene (PCE) was initially detected above the Maximum Contaminant Level (MCL) in groundwater samples collected from the Tumon-Maui well back in 1995. PCE was detected in the Tumon-Maui well at concentrations (9 to 15  $\mu\text{g/L}$ ) just above the MCL for PCE (5  $\mu\text{g/L}$ ). The base reviewed wellhead treatment alternatives for the Tumon-Maui. An air stripper was selected as the treatment alternative and installed in late 1996. Soon after the stripper was on-line, the unit experienced scaling. Pumps and other equipment were replaced after the scaling began, and in late 1997 the air stripper and well were taken off-line. The base began to review technologies to treat the hard water (calcium carbonate rich) prior to stripping the unit.

Mr. Castro asked if GEPA had been approached about recommending a solution to the air stripper problem and if the air stripper experience would be beneficial to GWA for future (remedial) consideration for wellhead treatment of public supply wells. Ms. Poland stated that the base advised GEPA of the air stripper issues and that the base was considering installing a pretreatment system. Mr. Castro asked if the water pipelines continue to scale, would the base again use the Tumon-Maui well. Maj Perkinson stated that the base is reviewing water consumption data for the next couple of months to determine water demands. Over a year ago, the base was using 100 million gallons per month; within the last four months, water use has decreased to about 55 million gallons per month. Repairs to the water line system are one of the main reasons for the reduction in water usage. Ms. Poland stated that in order to use the Tumon-Maui well as a potable water source, water samples from the well would first have to be analyzed and a treatment system would likely be needed. Ms. Poland said that the source of the contamination would need to be found and corrected.



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