

**MINUTES OF
WAIANAË COAST/LUALUALEI RESTORATION ADVISORY BOARD
(RAB) MEETING
NOVEMBER 14, 2002
WAIANAË PUBLIC LIBRARY**

ATTENDANCE: See attached

OPENING OF THE MEETING

Ms. Lisa Chan, Navy co-chair, opened the meeting at 7:07 p.m. She welcomed attendees and announced that Mr. Merwyn Jones, the community co-chair, is ill and will not attend tonight's meeting. Ms. Chan asked attendees to introduce themselves and requested that they answer the following question, "what has been a positive project or effort that has been done by the community, government or private industry, either alone or collectively, that has raised environmental awareness in Hawaii? Ms. Chan began by mentioning the Navy recently participated in America Recycles Day where Navy personnel visited various schools and talked to students about recycling. Another response to her question was the Navy's efforts to work for a natural/cultural resources regional geographic information system that will make data available to other facilities and to people who manage these facilities. The system will make people more aware of natural, cultural and historical resources in their respective areas. Other comments ranged from building fences on the big island to keep wild pigs from eating native plants to the bottle bill and community groups monitoring the debris at Makua Beach.

Ms. Chan informed attendees that this would be her last RAB meeting for the next three to five years because she has accepted a position in Japan. She will depart in January.

She also informed attendees that in October we had a meeting that included RAB members from all the Oahu RABs. A guest speaker from the Navy Environmental Health Center addressed the group and was well received. Ms. Chan said that the meeting gave members from the different RABs an opportunity to meet each other and to share information and ideas. Ms. Chan is hopeful that similar all Oahu RAB meetings will be held annually.

Ms. Chan announced that the Navy is developing a Community Involvement Plan (CIP) for each of the RABs. Previously, each RAB had a similar plan called the Installation Restoration Program Community Relations Plan. However, these plans have not been updated in five or six years. The CIP will give the Navy and RAB members a blue print for increasing participation in the Installation Restoration Program.

OLD BUSINESS

Minutes. The minutes from the April 24 meeting were approved.

NEW BUSINESS

Membership applications. Ms. Chan said that she received two applications for membership that were forwarded to Mr. Merwyn Jones for community consideration. Mr. Jones may conduct a RAB membership meeting to discuss the applicants. The applicants are Mr. Tom Lenchanko, who is a member of the Central Oahu RAB and Mr. Dennis "Dan" Madiera.

Ms. Chan informed attendees that Environmental Restoration Program brochures are available tonight that provide information about Restoration Advisory Boards, the Navy's Installation Restoration program in Hawaii and have applications for people interested in joining our RABs.

Technical presentations.

A. Remedial Investigation at Building 4 Pesticide Shop, Naval Magazine Pearl Harbor Branch (NAVMAG PH) Lualualei —Richard Hosokawa

Mr. Hosokawa introduced himself as the Navy's remedial project manager (RPM) for the Remedial Investigation (RI) being conducted at the Building 4 Pesticide Shop at NAVMAG PH Lualualei Branch. He explained that an RI is a detailed investigation of a site and includes taking samples of various media (soil, water, sediment) to determine the extent of contamination. Once levels of contamination are determined, a risk assessment is performed for people and animals. Then recommendations are made for further cleanup or no further action. Mr. Hosokawa gave a brief overview of what his talk will cover.

Mr. Hosokawa presented a facility location map showing NAVMAG PH Lualualei on a map of Oahu.

Mr. Hosokawa provided a summary of the process being followed for this project. The project is currently in the RI stage. The planning documents have been completed and field sampling was performed in March 2002. Presently, the draft RI report is being prepared and will be available this month. Once the draft report is completed, it will be reviewed by the Environmental Protection Agency (EPA) and the Hawaii Department of Health (DOH) and will be available for public review.

Mr. Hosokawa provided a site location map showing the former Pesticide Shop, Building 4, which is located near the entrance to NAVMAG PH Lualualei. The pesticide shop was used as a mixing area for pesticides and herbicides. Some of the original pesticide shop remains on site, but a large portion has been removed.

Mr. Hosokawa discussed the RI objectives. The objectives are to identify the type and location of pesticide chemicals previously identified in soils; determine if these chemicals are present in the groundwater beneath the site; and to assess potential impacts to people, plants, and animals. The RI will determine if a cleanup is needed.

Mr. Hosokawa provided a conceptual site model that graphically depicts potential contaminant release pathways. Some of the potential pathways are through dust and volatilization, erosion that carries contaminants to intermittent streams, and migration through soil into groundwater.

Mr. Hosokawa summarized the number of samples obtained during the RI field investigation:

- 32 surface soil samples,
- 32 shallow subsurface samples,
- 20 subsurface soil samples,
- 5 stream sediment samples, and
- 4 groundwater samples.

Mr. Hosokawa presented a figure showing the sample locations for surface and shallow soil samples, subsurface soil samples, sediment samples, and groundwater samples. The sample locations were overlain on an aerial photograph of the site. Three new wells were installed during the RI investigation, and another fourth well was installed during a previous investigation. The figure shows the estimated direction for groundwater flow. Mr. Hosokawa explained that the lateral extent of contamination was determined by stepping out from the original source area (pesticide shop). The highest levels were determined to be next the pesticides shop. Mr. Hosokawa pointed out that one of the wells was used as a background well, since it is hydraulically up gradient from the site.

Mr. Hosokawa summarized the chemicals of potential concern identified at the site. Chemicals identified were pesticides, dioxins/furans, solvents, and metals.

Mr. Hosokawa went into more detail about the chemicals of potential concern. Pesticides, dioxins/furans, and metals were detected in surface and shallow subsurface soils; solvents and metals were observed in groundwater; and pesticides, dioxins/furans, and metals were observed in sediment. He explained that the laboratory results were compared to EPA established conservative screening criteria to determine if further study is warranted.

Mr. Hosokawa summarized the preliminary conclusions of the RI. For soil and sediment, it appears that chemicals could pose a potential risk to people and animals. There are still some data gaps that need to be filled, such as the horizontal extent of certain chemicals, and the subsurface soil beneath the stream. The Niulii pond needs further investigation, and will be performed as part of another project. For groundwater, the source of chemicals is not known however, solvents could be from the site and metals are probably naturally occurring levels. The groundwater in the area is not used for drinking-water purposes, therefore chemicals do not pose a risk to people. The groundwater is not known to discharge to the surface, therefore, chemicals don't pose a risk to animals.

Mr. Hosokawa said that the Navy would further define the limits of contamination in soil and sediment. Also, further investigation of chemicals observed in groundwater is required. Solvent levels in groundwater are pretty low, but do exceed very conservative screening criteria. The Navy will complete the RI and cleanup the site as part of a removal action.

Mr. Hosokawa discussed the project schedule. The draft RI report will be completed in November 2002, and review of the draft RI will be performed by the EPA, DOH, and the public from December 2002 to January 2003. The final RI is scheduled for completion in April 2003. The document will be available for public review at the information depositories (Wahiawa Public Library, Waianae Public Library, and the University of Hawaii). A Removal Site Evaluation to determine limits of chemicals is scheduled for late 2003.

QUESTION: What kinds of solvents were found in groundwater?

ANSWER: Carbon tetrachloride, chloroform and Trichloroethylene (TCE) were detected at levels just above the conservative screening criteria, which were maximum contaminant levels (MCLs) and USEPA Region IX preliminary remediation goals (PRGs).

QUESTION: What does "MCL" mean?

ANSWER: It is the maximum contaminant level allowed for a specific chemical in drinking water (as mandated by the Safe Drinking Water Act). Cleanup goals for groundwater are typically established below this level.

QUESTION: How do you clean up contaminated soil?

ANSWER: Typically the Navy will excavate the soil and ship to a mainland landfill that is permitted to handle such wastes. This usually ends up being the most economical alternative. *[Update: In some instances the Navy has found it to be more economical to treat soil on-island. As an example, in 2003 the Navy plans on using thermal desorption to remove polychlorinated biphenyls (PCBs) from soil.]*

QUESTION: Shouldn't soil that is contaminated in Hawaii be dealt with in Hawaii?

ANSWER: It would be very expensive to bring soils back to Hawaii after they have been treated. Once the RI report is completed, the Navy will evaluate alternatives for treating soil on-island.

QUESTION: What is being done to contain contaminated soil when it rains?

ANSWER: Contaminants that were identified are not considered to be mobile and usually "stick" to soil particles. Other areas of the site are being evaluated to assure migration off-site has not occurred. There is a lot of vegetation at the site that will prevent erosion and blowing of dust. The original source of contamination (pesticide shop) is no longer active so the only contamination that could move is what's in the soil already. If there were exposed areas of soil, then erosion controls would be implemented, such as silt fences.

QUESTION: How deep is groundwater?

ANSWER: 100 feet.

QUESTION: There is an automotive shop at the motor pool; is this the same one as the old motor pool that is an NPL site.

ANSWER: All buildings at the facility are being assessed and will be covered in the next presentation for the PA/SI for various sites at NAVMAG PH Luaualei Branch.

QUESTION: What metals were detected?

ANSWER: Arsenic, iron, and lead were detected in soils. Mr. John Fern gave a brief explanation on the difference between naturally occurring metals in soils versus what was put there from human activities. Rocks in Hawaii originate from volcanic sources, which contain these metals. The rock weathers over time to form soils.

COMMENT: It was suggested that this information regarding geology and naturally occurring metals in soils be explained in a class open to the public. It could possibly be presented at the next RAB. It was stated that the Navy offers classes periodically that are open to RAB members.

ANSWER: The Navy will look into this.

QUESTION: Was lead detected above naturally occurring levels?

ANSWER: Yes, lead was found in surface soils above natural background levels. Arsenic is in groundwater, and is at a level just above the laboratory detection limit, and was found in the up gradient well.

QUESTION: Has anyone mapped out underground streams? Is there a potential pathway to the ocean?

ANSWER: There are some springs that discharge to the ground surface in the vicinity of the base. However, there are no known occurrences of underground fractures or "streams" that connect the groundwater to the ocean.

QUESTION: It was suggested that testing be done near springs and ocean since the local population eats the fish and limu (sea weed) there.

ANSWER: The current focus of the Navy's work is to find any contamination that may have been caused by the Navy. If it is found that the Navy's contamination has migrated off-site toward the ocean, then it will be investigated further. There are other State and Federal programs that can address contamination from non-Navy sources.

QUESTION: What about the long-term view? What if contamination shows up later after the investigation is completed?

ANSWER: The Navy typically performs long-term monitoring at all of their sites to assure contamination is not migrating. Also, for any Navy sites where contamination may be left in-place, a 5-year review process is required to assure no migration has occurred.

QUESTION: For dioxins/furans and solvents, what levels and types were found during the RI?

ANSWER: Levels of solvents in groundwater were above PRGs but below MCLs. Dioxins were detected, but at very low levels. They do not appear to pose a current health risk, but they are above industrial PRG levels. So basically they are elevated, but are not super high. Further action will be required to address the soil.

QUESTION: What is shelf life of dioxin?

ANSWER: Hundreds of years.

QUESTION: What pesticides were encountered?

ANSWER: DDT, DDE, and chlordane.

QUESTION: Is there a cumulative effect of all chemicals together?

ANSWER: Possibly yes, and risk assessments are being performed that will address this issue.

B. Preliminary Assessment/Site Inspection, Various Sites, NAVMAG PH Lualualei Branch—Richard Hosokawa

Mr. Hosokawa explained that Ruth Egami initially discussed the Preliminary Assessment/Site Inspection (PA/SI) last year. He will provide an update of this report. The PA/SI is being done to get a complete picture of the NAVMAG PH Lualualei facility. He referred to a poster board, which showed a map of the facility with many of the sites shown.

Mr. Hosokawa presented a facility location map showing NAVMAG PH Lualualei on a map of Oahu.

Mr. Hosokawa presented a slide showing the status of the project. The project is currently in the site inspection phase, which includes preparing planning documents (sampling plans) and conducting field sampling. Field sampling was performed in March 2002, and the draft PA/SI report is being prepared and will be available for review this month.

Mr. Hosokawa discussed the objectives of the PA/SI. The objectives are to comprehensively evaluate Lualualei Branch for potential environmental sites. Interviews with base personnel and review of aerial photographs were performed. The PA/SI also inventories ongoing environmental response actions. Sites identified during the PA phase that have potential for contamination were investigated. Recommendations for further work are then made based on the SI. If not contamination is found, then no further action will be recommended.

Mr. Hosokawa discussed the results of the PA. A total of 659 existing and demolished facilities/sites were evaluated. Twenty-seven sites were identified for study under the SI; the remaining sites were recommended for no further action. The 27 identified sites consist of disposal areas, operations areas, sanitary sewer and storm water systems, and ranges.

Mr. Hosokawa presented a map showing the locations of the 27 sites identified for investigation.

Mr. Hosokawa reviewed the SI activities performed. Sampling included soil vapor for sites suspected to have volatiles contamination; surface soils from disposal areas and previous operational facilities; shallow subsurface soil from sites where chemicals were suspected to be present at depth; sediment and water from storm water and sewer collection basins, and groundwater next to a former dry well. Samples were analyzed for chemicals suspected to be present and then screened against conservative levels.

Mr. Hosokawa discussed the results from the disposal areas. All of the disposal areas sampled will require further evaluation and include the scrap metal landfill [volatile organic compounds (VOCs) found], and the "fill area" [polynuclear aromatic hydrocarbons (PAHs), metals and dioxins found].

Mr. Hosokawa discussed the results from operations areas. Four sites that were investigated require no further evaluation since no contamination was found:

- Building 109 – Print/Stencil Shop
- Building 171 – Battery Charging Shop and PWC Storage
- Building 172 – Battery Charging Shop
-
- Building 173 – Battery Charging Shop and Dunnage Area

Eleven sites will require further evaluation:

- Building 4 – Auto Shop
- Building 7 – Locomotive Shop
- Building 78 – Garage
- Building 112/112A – Sumps
- Building D122 – Project Overhaul Shop
- Building 304 – Wash Area
- Building 415 – Automotive Service Station
- S418 – Battery Charging Shop
- S461 – Battery Washing Shed
- Building 524 – Salvage Yard
- Homemade Incinerator

QUESTION: What is dunnage? Was dunnage buried?

ANSWER: Dunnage is crates and pallets used to package munitions. The Navy will check into whether dunnage was buried anywhere.

Mr. Hosokawa stated that the PA/SI report would contain details of contamination.

Mr. Hosokawa discussed the SI results for the storm water and sewer systems. The storm water and sewer systems, the S522 sewage tank, and the former dry well showed evidence of contamination and will require further evaluation. Metals, total petroleum hydrocarbons, pesticides, VOCs, semi-volatile organic compounds (SVOCs) and PCBs were detected above conservative screening criteria.

Mr. Hosokawa discussed the SI results for the range areas. Buildings 472 and 473, the former rocket test facility, require no further evaluation since test results did not exceed screening criteria. Building 487, the former trap and skeet range also requires no further evaluation. Further evaluation is required for S317/Building 412, the closed small arms range; and S341 and S347, the ordnance burning areas. Lead shot was found as the primary contaminant.

QUESTION: What kinds of contaminants were found in rocket test area?

ANSWER: Explosive residues were encountered and will be investigated further.

Mr. Hosokawa presented a map showing each of the investigated sites and whether the sites require further evaluation. Each of the sites identified for further evaluation will be looked at individually. They will be prioritized by sized and location and will follow the guidelines of the Navy's IR cleanup program.

Mr. Hosokawa discussed the project schedule. The draft PA/SI report will be completed in November 2002, and the U.S. EPA, DOH, and public will review it from December 2002 to January 2003. The final PA/SI is scheduled for completion in March 2003. The document will be available for public review at the information depositories (Wahiawa Public Library, Waianae Public Library, and the University of Hawaii).

QUESTION: Does the EPA review the document?

ANSWER: Yes, they do, however, the State of Hawaii, Department of Health is the primary reviewer.

QUESTION: When does the EPA get involved?

ANSWER: They are directly involved for Base Realignment and Closure (BRAC) actions, and National Priorities List (NPL) sites (also known as Superfund). NPL sites are determined by a scoring system, anything above 28.5 is added to the list. Pearl Harbor Naval Complex and NCTAMS are NPL sites. NRTF Lualualei is an NPL site while NAVMAG is not. NAVMAG may be considered for NPL listing after the PA/SI is completed.

QUESTION: When was ordnance area and range last used?

ANSWER: Probably in the 1970's.

QUESTION: For the open burn detonation sites, were there permit requirements?

ANSWER: Permit requirements probably weren't in effect at the time; the only currently permitted area for this type of activity is at the Army's Makua facility.

QUESTION: What is a dry well?

ANSWER: A dry well is a drain for wastewater. It is excavated to a depth that does not encounter the groundwater table.

**C. Presentation on the Environmental Protection Agency's (EPA) Technical Assistance Grant (TAG) and the Navy's Technical Assistance to Aid Public Participation (TAPP)-
Bill Roome**

Mr. Roome introduced himself as the Navy Public Affairs Office representative and stated that he would be providing a general overview of two federal programs that were created to assist the public in understanding the technical and scientific aspects of installation restoration activities occurring near their communities and related reports. These programs are known as the Technical Assistance Grant (TAG) and Technical Assistance for Public Participation (TAPP).

Mr. Roome explained that the TAG program is managed by the EPA and provides up to \$50,000 to qualified community groups to hire an independent technical advisor and a grant administrator, purchase office supplies, and print newsletters and fact sheets. Mr. Roome also identified activities that do not qualify for funding such as litigation, lobbying, social activities, and travel.

TAG-qualified community groups must reside near a site listed on the National Priorities List (NPL) and be affected by a release or threatened release at a facility where response action is being conducted. They must also be incorporated and have procedures for managing the TAG and keeping records. Mr. Roome provided some examples of groups that would not qualify for a TAG such as a potentially responsible party or university group.

Mr. Roome then reviewed the procedure for applying for a TAG and provided the following references to additional information about the TAG program:

- Mr. David Cooper Community Involvement Coordinator
75 Hawthorne street (SFD-3)
San Francisco, CA 94405
E-mail: cooper.david@epa.gov
- www.epa.gov/seahome/grants/src/grant.htm
- www.epa.gov/superfund/tools/tag

The Navy also provided a fact sheet that explained the TAG program in more detail.

Next, Mr. Roome introduced the TAPP program and explained that the Chief of Naval Operations (CNO) manages this Department of Defense (DoD) program for Navy cleanup sites. The program is funded through the Environmental Restoration, Navy (ER,N) account and can provide RAB members with up to \$25,000 per year or one percent (1%) of the total cost of completing environmental restoration at an installation, whichever is less. The funds are only available to RABs and Technical Review Committees (TRCs).

Mr. Roome stated that TAPP funds should be used to assist RAB members in interpreting scientific and engineering data related to environmental investigation and cleanup. Eligible TAPP projects may assist the RAB to interpret technical documents; assess technologies for site investigation, cleanup and monitoring; participate in the risk assessment process; understand health implications related to the site, and; to receive technical training. Mr. Roome provided some examples of activities that would not qualify for TAPP funds such as payment of attorney fees, generation of new data, health studies, and community outreach events.

Mr. Roome then provided a brief summary of the TAPP application process. He emphasized that the RAB should first look at alternative sources of funding (such as the TAG) before applying for TAPP funds. Once TAPP funds are distributed, the RAB co-chair must submit an annual report on the use of the funds to the CNO.

Mr. Roome provided the following Internet website reference to additional information about TAPP program: www.dtic.mil/envirodod/rab/tapphandbk/section2.htm. *[Note that this website link has been updated; please see:*

- www.dtic.mil/envirodod/Stakeholder/WCommunity/SI_WCTAPP.htm].

The Navy also provided a fact sheet that explains the TAPP program in more detail. Mr. Roome explained that the TAPP funds might be used to hire a consultant to help RAB members understand technical documents. Many times these documents contain technical language that is difficult for a layperson to understand.

QUESTION. Are tax dollars used in the Environmental Protection Agency's TAG program?

ANSWER. Yes.

QUESTION. Can TAGs be used by RABs?

ANSWER. No, not directly. However, RAB members could be part of an incorporated community entity that applies to EPA for the TAG.

D. Community Involvement Plan – Ms. Karen Coghlan (Earth Tech, Inc.) and Mr. Bill Roome (Commander Navy Region Hawaii Public Affairs)

Mr. Roome introduced Ms. Coghlan of Earth Tech, Inc. who is currently preparing a Community Involvement Plan for the Navy. She opened her presentation by emphasizing that community involvement is an important component of the Navy Environmental Restoration Program that ensures that citizens living near military cleanup sites have the opportunity to influence cleanup decisions affecting their community and livelihood.

This program stresses early and continuous community involvement, direct contact between Navy personnel and local residents, and interactive activities such as site visits and technical support.

Ms. Coghlan explained that the Comprehensive Environmental Response Compensation, and Liability Act (CERCLA) requires that a Community Relations Plan (CRP) be prepared for sites or facilities where remedial actions are to be taken. CRPs are also required to be updated if changes to the proposed remedy for a response site are made. In addition, periodic updates are recommended to reflect new interests and concerns of the public.

Ms. Coghlan stated that the EPA recently published new guidance on community involvement and preparing CRPs in April 2002. This new guidance is titled *Superfund Community Involvement Handbook*. She clarified that the guidance now refers to CRPs as *Community Involvement Plans (CIPs)* to stress the importance of *involvement* by the community.

Ms. Coghlan said that the Navy is proposing to prepare one comprehensive CIP that addresses all Navy facilities in Hawaii, rather than separate CIPs for each Navy facility. This approach will avoid duplication of text and save costs associated with the preparation and publishing of the plan.

Ms. Coghlan explained that to update its community involvement program, the Navy has identified communities likely to be affected by the Navy Environmental Restoration Program and begun to conduct interviews in these communities to identify local interests and concerns related to the program.

A key area of inquiry will be the public's desire to participate in this program. This input will be necessary to ensure that the new CIP is responsive to the community's concerns and involvement preferences.

Ms. Coghlan stated that the Navy has begun interviews with community representatives, environmental and religious group members, business and home owners, base employees, elected/appointed officials, regulators, military representatives, and other interested folks. Interviewees represent a broad spectrum of social makeup within the larger communities (e.g., social, religious, fraternal groups). She stated that the Navy has conducted approximately 25 interviews to date on Oahu. The Navy has scheduled an additional 10 (roughly) interviews on Oahu in December and January and will be interviewing about 15 people on Kauai early next year.

The Navy will analyze the results of the community interviews to identify key issues relevant to Navy Environmental Restoration Program at each of its facilities and to the Navy's relationship with the community at large. The information will then be used to prepare a Draft and Final CIP. This CIP will be consistent with the new EPA guidance and will recommend community engagement methods necessary to support Navy environmental restoration projects in the future. The draft CIP is scheduled to be completed in March or April of 2003.

Ms. Coghlan stated that based on the interviews conducted to date, most interviewees have a favorable view of the Navy's general presence and activities in Hawaii. However, there seems to be little awareness regarding the Navy's specific activities and efforts to restore and protect Navy lands and Hawaii environmental resources.

COMMENT: Does the Navy really have a good rapport with the community? The community is not really aware of Navy activities. Olelo (cable, public television program) is a good vehicle for getting the word out. Also, a good way to get the word out is through the high school media programs.

COMMENT: A suggestion was made to have a site walk of NAVMAG PH Lualualei to allow the community to become familiar with the sites and have access to potential cultural resources.

[UPDATE: The Navy is currently evaluating the potential for this type of activity.]

COMMENT: The Navy could support local high schools and their media programs by having these schools introduce the Navy's Installation Restoration Program on film.

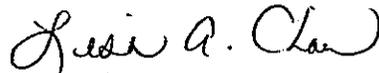
COMMENT: The Navy could use local schools' mailing lists to solicit community interest in their Installation Restoration program.

COMMENT. The Navy could conduct workshops and classes to educate communities about their Installation Restoration program.

COMMENT. Site visits are a good way to educate communities about your program.

Adjournment. The meeting adjourned at 9:15 p.m.

Respectfully submitted,



Ms. Lisa Chan
Navy Co-Chair
Commander, Navy Region Hawaii

LIST OF ATTENDEES
WAIANAE COAST/LUALUALEI RESTORATION ADVISORY BOARD
MEETING
NOVEMBER 14, 2002
WAIANAE PUBLIC LIBRARY

NAME AND ORGANIZATION

Mr. Ron Boyle, Earth Tech
Ms. Lisa Chan, Navy co-chair, Commander Navy Region Hawaii
Ms. Karen Coghlan, Earth Tech
Dr. Fred Dodge, RAB member
Mr. John Fern, Earth Tech
Ms. Leslie Kahihikolo, Tetra Tech
Mr. Michael Miyasaka, RAB member, State Department of Health
Mr. Peter Nakamura, Commander Navy Region Hawaii
Mr. Sparky Rodriguez, Waianae coast resident
Mr. Bill Roome, Commander Navy Region Hawaii
Mr. Terence Tengan, Commander Navy Region Hawaii
LT. Trent Wolfersberger, Commander Navy Region Hawaii

Distribution List

RAB Community Members:

Mr. Merwyn Jones, Waianae RAB Co-Chair
Mr. Alvin K. Awo
Mr. Howard F. Criss, Jr.
Dr. Fred Dodge
Mr. Anthony J. Delicata
Mr. John Kaopua
Mr. Michael Miyasaka
Mr. Lawrence M. Moore
Mr. Leland Nakai
Ms. Pat Patterson
Ms. Cynthia Rezendes
Mr. Steven Robertson
Ms. Frances Kama-Silva
Ms. Helene Takemoto

Elected Official:

The Honorable Colleen Hanabusa, Hawaii State Senate
The Honorable Emily Auwae, Hawaii House of Representatives
The Honorable Michael Kahikina, Hawaii House of Representatives

RAB Technical Members:

Mr. Lewis Mitani, Remedial Project Manager, U.S. Environmental Protection Agency,
Region IX
Ms. Gwendolyn Eng, U.S. EPA, Region IX, ATSDR
Mr. Brooks Yuen, Deputy Manager, Board of Water Supply
Ms. Laurie Sullivan, Coastal Resources Coordinator, NOAA
Mr. Michael Miyasaka, HEER Office, State of Hawaii, Dept. of Health
Commanding Officer, U.S. Coast Group Honolulu, Coast Guard Base Sand Island
Mr. Gordon W. Tribble, Interior Dept., U.S. Geological Survey, Water Resources Division
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Mr. John Naughton, National Marine Fisheries Service
Mr. Leland Nakai, Oahu Civil Defense
Dr. Roger Fujioka, Director, Water Resources Research Center, University of Hawaii
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