DRAFT MINUTES OF THE

PEARL HARBOR-HICKAM-KALAELOA RESTORATION ADVISORY BOARD (RAB) MEETING

OAHU VETERANS CENTER, HONOLULU, HAWAII

I. AUGUST 27, 2025 ATTENDANCE: SEE ATTACHMENT A.

II. OPENING

Ms. Stephanie Kawasaki, facilitator of the meeting, opened the meeting at 6:00 p.m. and led the introduction of the RAB members.

Captain (CAPT) Samuel White, RAB Navy Co-chair and Commanding Officer of Joint Base Pearl Harbor-Hickam (JBPHH) introduced himself and Colonel Gregory Hammond, Deputy Commanding Officer of JBPHH and spoke briefly about the agenda items for the meeting.

Mr. Henry Curtis, Community Restoration Advisory Board (RAB) Co-chair, introduced himself.

Ms. Helene Takemoto, RAB member, introduced herself.

Mr. Guy Inouye, RAB member, introduced himself.

Mr. Cruz Vina Jr., RAB member, introduced himself.

Ms. Kawasaki asked the moderator, Ms. Dayna Yoshizaki, if there were any RAB Members attending via Zoom. Ms. Yoshizaki confirmed that there were none.

Ms. Kawasaki then introduced herself and presented the structure of the meeting.

Mr. Kyle Kajihiro, RAB member, arrived and introduced himself.

Ms. Jocelyn Tamashiro, Environmental Restoration (ER) Program Manager at Naval Facilities Engineering Systems Command (NAVFAC), Hawaii, asked attendees from the United States Environmental Protection Agency (EPA) to introduce themselves.

Ms. Karen Davis, Community Involvement Coordinator for Red Hill at EPA, introduced herself.

Ms. Lynn Brockway, member of the environmental team for Red Hill at EPA, introduced herself.

Ms. Kawasaki asked the moderator, Ms. Dayna Yoshizaki, if there were any regulators attending via Zoom. Ms. Yoshizaki confirmed that John Chesnutt, EPA, was attending via Zoom.

Mr. Ernie Lau, Board of Water Supply (BWS), introduced himself and his coworker, Ms. Joyce Lin, BWS.

III. REVIEW OF APRIL 2025 MEETING MINUTES

Ms. Jocelyn Tamashiro introduced herself as the ER Program Manager at NAVFAC Hawaii, and introduced the agenda for the RAB meeting.

Mr. Curtis asked if anyone had any issues with the April 2025 meeting minutes. There were no objections, and all RAB members were in agreement; the meeting minutes were approved.

IV. REVIEW OF RAB CHARTER AND NOMINATION OF NEW RAB MEMBERS

Mr. Curtis asked the RAB members if they had looked over the RAB charter and asked if any members disagreed with the charter or had concerns. There were no objections, and the RAB members agreed to sign the charter.

Question 1 (Q1): (Attendee) Can the public know what is in it [the RAB Charter]?

Mr. Curtis agreed to provide a highlight of the RAB Charter. Mr. Curtis explained that some of the points of contention that were resolved include the following: RAB members will serve for 3 years; there is one RAB meeting each year where new members can join the RAB; there is a minimum of 5 members in order to be a RAB; there is a maximum of 20 community members on the RAB; the RAB is supposed to have a diverse representation; the Community Co-chair is elected for a 3-year term; the RAB members can vote out the chair; the majority of RAB members present at a meeting make decisions; the Navy Co-chair and Community Co-chair jointly come up with the agenda; people who have comments can notify the Co-chairs a couple months in advance of what they would like to see in a future agenda; there are two site visits per year; the community must be on the RAB to attend the site visit.

The Co-chairs signed the RAB Charter, and the RAB members initialed the RAB Charter. Ms. Tamashiro stated that the signed RAB Charter will be sent to all RAB members and will be posted on the community involvement tab of the Red Hill Environmental Restoration, Navy (ERN) website.

CAPT White explained the process for new membership nominations. The RAB will go over the applicants one-by-one; the applicant will introduce themself, and then the RAB will vote on whether the applicant should be added to the RAB. Mr. Curtis agreed to this process.

Mr. Kajihiro asked if there is a list of applicants, as there may be one applicant missing. CAPT White was aware of five applicants, and Ms. Tamashiro confirmed that at the time of the meeting there were five applications received. Ms. Tamashiro listed the applicants and asked if there were any other applicants. Mr. Hanaloa Helelā stated that he applied to be a RAB Member. CAPT White clarified that the process for accepting applications included the following: the Navy would receive an application, and CAPT White would share the name and whether they meet membership requirements with the Community Co-chair for awareness prior to voting. CAPT White stated that as of yesterday, they had received 5 applications, and he was not aware of any other applicants. Mr. Curtis concurred that he was not aware of any other applicants. Mr. Kajihiro showed Ms. Tamashiro the application for Mr. Helelā, which he received via text message. Ms. Tamashiro confirmed that the application indicates Mr. Helelā is a member of a community organization that does work in the Waipio Peninsula area. However, the process for membership application requires that CAPT White should vet applicants before voting. Ms. Tamashiro stated that the application met the requirements for RAB membership, and CAPT White agrees to vote on six applicants instead of five if the RAB members agree. There were no objections, and the RAB members agreed to vote on six applicants.

Ms. Tamashiro asked the first applicant, Ms. Francie Whitfield, to introduce herself. Ms. Whitfield introduced herself as a former RAB member for the Pearl Harbor-Hickam RAB from approximately 2016–2018, and Ms. Tamashiro confirmed that Ms. Whitfield would be a voting member of the RAB should her application be accepted. There were no questions from the RAB members or the public, and the RAB voted on Ms. Whitfield's nomination. Ms. Whitfield's application was accepted, and she was added to the RAB.

Ms. Tamashiro asked the second applicant, Mr. Ernest Lau, to introduce himself. Mr. Lau introduced himself as representing the BWS and Ms. Tamashiro confirmed that Mr. Lau would be a non-voting member of the RAB should his application be accepted.

Q2: (Ms. Takemoto) Are you representing yourself as a member of the community or the BWS?

Answer 2 (A2): (Mr. Lau) The BWS. I no longer live in Waipahu.

The RAB voted on Mr. Lau's nomination. Mr. Lau's application was accepted, and he was added to the RAB in an ex officio (non-voting) capacity because of his role with the BWS.

Mr. Robert Huber, RAB member, arrived and introduced himself.

Ms. Tamashiro asked the third applicant, Ms. Joyce Lin, to introduce herself. Ms. Lin introduced herself as an engineer at the BWS and Ms. Tamashiro confirmed that Ms. Lin would be a non-voting member of the RAB should her application be accepted.

Q3: (Mr. Curtis) While she does work for an agency, she's not a decision maker at the agency but a staff member. I'm not sure if that makes her a voting or non-voting member.

A3: (Ms. Tamashiro) On her application she listed the BWS as her address and contact information.

There were no questions from the RAB members or the public, and the RAB voted on Ms. Lin's nomination. Ms. Lin's application was accepted, and she was added to the RAB in an ex officio (non-voting) capacity because of her role with the BWS.

Q4: (CAPT White) I wanted to ask Mr. Lau if he is good with this nomination before proceeding. Are you good with this nomination?

A4: (Mr. Lau) Joyce is the next generation, so we prepare this effort for multiple generations. So, I support this.

Ms. Tamashiro asked the fourth applicant, Ms. Susan Gorman-Chang, to introduce herself. Ms. Gorman-Chang introduced herself as a member of the Ewa Beach neighborhood board and a member of the original Red Hill Community Representation Initiative. Ms. Tamashiro confirmed that Ms. Gorman-Chang would be a voting member of the RAB should her application be accepted.

There were no questions from the RAB members or the public, and the RAB voted on Ms. Gorman-Chang's nomination. Ms. Gorman-Chang's application was accepted, and she was added to the RAB.

Ms. Tamashiro asked the fifth applicant, Ms. Susan Pcola-Davis, to introduce herself. Ms. Pcola-Davis introduced herself as being interested in the RAB, as a non-organization community member in Hawaii for 50 years, and as having testified regarding Red Hill. Ms. Tamashiro confirmed that Ms. Pcola-Davis would be a voting member of the RAB should her application be accepted.

There were no questions from the RAB members or the public, and the RAB voted on Ms. Pcola-Davis' nomination. Ms. Pcola-Davis' application was accepted, and she was added to the RAB.

Q5: (CAPT White) Can you confirm that you have vetted the qualification of Mr. Helela?

A5: (Ms. Tamashiro) Yes, he does qualify.

Mr. Helelā introduced himself as a member of Wai Ola Alliance and a member of Kaohewai. Ms. Tamashiro confirmed that Mr. Helelā would be a voting member of the RAB should his application be accepted.

There were no questions from the RAB members or the public, and the RAB voted on Mr. Helelā's nomination. Mr. Helelā's application was accepted, and he was added to the RAB.

Q6: (Mr. Curtis) How many current RAB members are there?

A6: (Ms. Tamashiro) There were 8 prior to tonight. So, with the 6 here, there would be 14.

Q7: (Mr. Curtis) So next year, 6 more can join?

A7: (CAPT White) Yes, that is a very good point. The next session for voting on new membership will be in August 2026.

V. NEXT RAB MEETING AND SITE TOUR DATES

CAPT White informed new members that according to the RAB Charter, the RAB will meet three times per year. CAPT White proposed the next meeting be held on January 7, 14, or 21 of 2026. Mr. Curtis said that the 21st is the first day of the legislature, so the meeting should not be on that day. CAPT White proposed January 14, 2026, for the next RAB Meeting. There were no objections. The next RAB Meeting was scheduled for January 14, 2026.

Ms. Tamashiro proposed two sites for the RAB visits: Aiea Laundry, adjacent to St. Elizabeth School, where remediation has been ongoing for over 20 years and there is a remediation system in place; or Pearl Harbor [Sediment site], where remediation in the harbor has taken place over the last several years. Mr. Curtis mentioned that one of the sites on Waipio Peninsula had dioxin levels 1000 times higher than the levels that would trigger a cleanup, and that the site has not been delineated. Mr. Curtis proposed that this is a site that could be visited as well.

Ms. Pcola-Davis motioned to visit Aiea Laundry due to fact that there is an elementary school and church there with keiki that need to be protected. Mr. Helelā asked if there could be more discussion amongst the RAB about the subject of the site visits; Mr. Curtis agreed that there could be more discussion. Mr. Helelā said he is more interested in the hotspots [previously mentioned by Mr. Curtis] than something that has been remediated for 20 years.

CAPT White proposed to visit both sites since the RAB can visit two sites in a year; however, the RAB would have to vote on this prior to the second site visit. Mr. Curtis asked the RAB members if there were other sites they would be interested in visiting before the RAB voted.

Q1: (Mr. Kajihiro) If we do the Pearl Harbor [Sediment] site visit, is [Waipio Peninsula] where Pearl Harbor sediments are being stored from the sediment remediation projects?

A1: (Ms. Tamashiro) Yes, Waipio Peninsula is the location where the dredged sediments are being placed.

Q2: (Mr. Curtis) Would you support a friendly amendment of two site visits next year, Aiea Laundry first, Pearl Harbor/Waipio Peninsula second?

A2: (Ms. Pcola-Davis) I second that.

Q3: (Ms. Takemoto) Are we going to look at only St. Elizabeth school or the entire area that is being remediated? There are other wells by the cemetery. If we had a map, that might be easier.

A3: (Ms. Tamashiro) We do not have a map ready to share with RAB members tonight. If you want to table this discussion I can have a map.

C1: (CAPT White) I really do not want to put off site visits anymore. Over the last 12 months we've only done one site visit, and I want to get into the rotation of getting people out there. I want it to be on the record that I voted yes to everyone that wanted to [join the RAB].

C2: (Mr. Curtis) Make one more modification that it is the Greater Aiea Laundry site first, and then Waipio and Pearl Harbor.

C3: (CAPT White) Agreed. If we wait first to look at a map and put it off to another meeting, we are going to run out of time and find ourselves without having a site visit. I would like us to proceed. I am not specifying which site; we can proceed with visiting the site everyone votes for. We can do a bundle where we do one this time and one next time. Or we can pick whichever one you want to pick, let us say the laundry. Then bring other sites, including the Harbor [Sediment site], next time.

C4: (Ms. Takemoto) The reason I brought up Aiea Laundry is because I wanted to know the extent of the area of the site visit, which is why I thought a map would be helpful. But since you do not have it, I'm not saying we should postpone a decision. All I am saying is what does that include? Same thing for Pearl Harbor.

C5: (CAPT White) That is a fair question, and that will be answered when you are there to visit.

Mr. Curtis proposed to vote that the RAB visits Aiea Laundry first and Waipio Peninsula [Pearl Harbor Sediment site] second, and that both site visits will take place next year.

Q4: (Mr. Helelā) Can the Navy tell us more about the other option of in the Harbor? Did you have sites in mind already?

A1: (Mr. Curtis) It is a bundle, so we are voting on both of them now.

C6: (CAPT White) Henry's point is that we will get to do both. We will visit Aiea Laundry first and visit the Harbor [Sediment site] next.

Ms. Tamashiro pulled up Google Maps and showed the areas pertaining to Aiea Laundry, including where the laundry used to be located, the grassy area, and monitoring wells to the west. The on-the-ground visit would be to the concrete area, the school, and the grassy area in the back.

Q5: (Mr. Curtis) And I assume the basement where you had escaping gases?

A5: (Ms. Tamashiro) We would have to coordinate with the school to make sure that when we choose to do a site visit that we would be allowed to do that. It depends on what the school says.

Q6: (Mr. Helelā) Did you mention escaping gases in the basement? Can you elaborate on that?

C7: (Ms. Tamashiro) We conducted tests for it.

A6: (Mr. Curtis) There was a buildup of gases in the basement; therefore, the military was working on reducing the gases there because we did not want the gases rising up and affecting the kids above.

Q7: (Mr. Kajihiro) I remember before there were some monitoring wells in the water at Aiea Laundry. Is that still active, and is that something we could see?

A7: (Ms. Tamashiro) Yes, I believe we still have those seep wells in the same locations along the shoreline that we can visit.

CAPT White asked Mr. Curtis if everyone agreed that the first site visit would be to Aiea Laundry. Mr. Curtis asked to pull up Waipio Peninsula on Google Maps.

C8: (Ms. Kim Markillie) Jocelyn, just a clarification, it is not Waipio Peninsula, it is the entire Harbor. It would be Pearl Harbor [Sediment site] as the site.

C9: (Ms. Tamashiro) What we are proposing is a site tour from the water of the harbor sediment site.

Mr. Curtis requested that Ms. Markillie point out on the map where the site is located. Ms. Tamashiro introduced Ms. Kim Markillie, former project manager for the Pearl Harbor Sediment site, and Ms. Markillie came forward. Ms. Markillie pointed out several decision units, including Aiea Bay; near Waiau Power Plant, who is a potentially responsible party; most of Southeast Loch, where about 50% of the remediation has already been done; Bishop Point; Oscar 1 and 2 Piers; and off Ford Island Landfill.

Q8: (CAPT White) Would you mind pointing out where we would be getting underway, is it Merry Point?

A8: (Ms. Markillie) We would get on either at Merry Point or on one of the finger piers off the back side of Ford Island.

Q9: (Mr. Curtis) Can you point out where Walker Bay is for us?

A9: (Ms. Markillie) Walker Bay is right here. It is not part of the Pearl Harbor Sediment remediation effort; it is separate.

C10: (Mr. Curtis) That is where the thousand times dioxin levels site is.

C11: (Mr. Helelā) And that is where Hanaloa Fish Pond is.

C12: (Ms. Markillie) That is the City and County of Honolulu doing the cleanup for that site—no, I am sorry, that is Oahu Sugar.

CAPT White stated that the only motion made was to tour Aiea Laundry and then follow on with a visit to Pearl Harbor Sediment site. He asked if the RAB should vote or if the vote should be tabled. Mr. Curtis asked if the RAB was happy with a site visit to Aiea Laundry first, and the Pearl Harbor Sediment site boat tour second. The RAB voted by show of hands, and the RAB agreed to this. CAPT White proposed that the RAB needed to vote on the date next, and clarified that at the next meeting the RAB would not need to discuss the subject of the second site visit, just the timing of the visit. The RAB agreed to this.

Ms. Tamashiro asked if the RAB would like to schedule the site visit for around the same time as the next meeting, such as the weekend after. Mr. Helelā proposed the weekend before the meeting so the RAB could discuss the visit at the meeting. This would place the site visit on the weekend of January 10 and 11, 2026. CAPT White proposed that by that logic, the Pearl Harbor Sediment site visit should happen the weekend before the RAB meeting after that. Mr. Curtis agreed. Ms. Tamashiro agreed that she would contact RAB members to schedule the visit.

Q10: (Mr. Helelā) With the Harbor tour, were we going into the west side of Waipio Peninsula near Walker Bay?

A10: (Ms. Tamashiro) No.

C13: (Mr. Helelā) I think that is something to consider.

C14: (Mr. Curtis) I agree with you, we will try to do it. You are in for a 2-year, 3-year term.

Ms. Tamashiro acknowledged there were comments online.

Q11: (Ms. Marti Townsend, online) Can RAB members share photos with the public from site visit?

A11: (CAPT White) As far as the base is concerned, when we do the harbor tour, we will have the Public Affairs Officer talk to you about what pictures you can and cannot take. As far as the laundry is concerned, is there any type of restriction?

C15: (Ms. Tamashiro) There are no restrictions with Aiea Laundry.

Q12: (Mr. John Chesnutt, online) The Waipio sites are something to consider so that everyone is fine with what can be seen. Henry is talking about the Oahu Sugar Site on Waipio Peninsula where the dioxin was found. It is an old pesticide mixing site operated by a private sugarcane company that leased the land from the Navy. This would require a walk into the site and the need to potentially wear protective booties over shoes.

C16: (Mr. Curtis) To clarify slightly, that was Hawaiian land taken by the government and then given to a sugar company that went out of business. Therefore, the city, state, and federal government have been arguing about who should clean it up.

There were no questions from the public in attendance.

VI. TECHNICAL PRESENTATIONS

Red Hill Per- and Polyfluoroalkyl Substances (PFAS) Remedial Investigation Update Joint Base Pearl Harbor-Hickam, Oahu, Hawaii – Ms. Charlotte Rangel, NAVFAC Pacific

Ms. Charlotte Rangel introduced herself to the audience as a supervisory remedial project manager with NAVFAC Hawaii and began her presentation. Ms. Rangel began with an overview of the presentation and a simplified version of the CERCLA process.

A list of all response actions relevant to the Red Hill PFAS Remedial Investigation to date were presented at the bottom of the slide, starting with the November 2022 Aqueous Film-Forming Foam (AFFF) accidental release that triggered this project. Several spill response activities have been conducted. These included working with state and federal regulators to develop a work plan; initiating an expedited action of 4 quarters, or 1 year, of groundwater sampling across the Red Hill Facility; and beginning the drilling

of new monitoring wells near the site of the 2022 accidental AFFF release. The results of the first, second, and third quarterly monitoring events are to be shared during the presentation.

The remedial investigation is divided into two investigation areas. Area A is the initially established PFAS investigation area as a result of the November 2022 accidental AFFF release. As a result of PFAS detections during the 2023 baseline groundwater monitoring event, Area B, which is in the western part of the facility, became incorporated in this remedial investigation. Area B has been extended beyond its initial boundary based on results of the Quarter 1 (Q1) groundwater sampling results which showed PFAS present at concentrations in groundwater monitoring wells above project screening levels within Area B.

Two different groundwater zones during drilling and well installation activities have been encountered at the Red Hill facility: the deep groundwater aquifer and shallow groundwater. Shallow groundwater can sit anywhere in the zone above the deep groundwater but has been encountered at depths as shallow as 30 to 40 feet below ground surface. The shallow water is naturally of poor quality and is not suitable to be used as drinking water in any condition. Below the shallow water, the deep groundwater has been encountered in volcanic bedrock between 100 to 600 feet below ground surface within the Red Hill property boundary. The Navy has installed wells in both the shallow groundwater and deep groundwater to help understand what, if anything, is present and where. This helps provide a full picture to build a complete conceptual site model for this remedial investigation.

Quarterly groundwater sampling was conducted across the Red Hill Facility in the events described below:

- First quarterly groundwater monitoring event (Q1), September to December 2024: 34 wells were sampled: 30 deep groundwater monitoring wells and 4 shallow groundwater monitoring wells. These results were presented at the previous April 2025 RAB meeting.
- Second quarterly groundwater monitoring event (Q2), January to April 2025: 40 wells were sampled: 30 deep groundwater monitoring wells sampled during Q1 plus one additional deep well, and 4 shallow groundwater monitoring wells sampled during Q1 plus 5 additional shallow wells. The highest concentrations of PFAS were observed within Area B during the Q1 sampling event, so the Navy sampled 6 additional wells within Area B starting with the Q2 event and onward.
- Third quarterly groundwater monitoring event (Q3), April to July 2025: 41 wells were sampled: the same 40 wells sampled during Q2 were sampled during Q3, with the addition of one newly installed shallow well.
- Fourth quarterly groundwater monitoring event (Q4), July 2025 to present: The same 41 wells from Q3 are being sampled, with the addition of two newly installed deep wells. Sample results are still pending.

At the time of the previous RAB Meeting in April 2025, three new PFAS wells were being installed as part of the expedited PFAS well installation program at Area A. These wells, two in deep groundwater and one in shallow groundwater, have since been successfully completed. Results of samples from the shallow well are to be presented later in the presentation. The deep wells will be sampled for the first time during the Q4 groundwater monitoring event, which began in July 2025. The samples collected during the Q4 event will be shared at the next RAB meeting.

The results from Q1 through Q3 sampling at Area A were displayed in a table on the presentation slide. The table showed the minimum and maximum concentrations of PFAS compounds that were detected above the project screening levels (PSLs), which were listed in the right-hand column of the table.

Grayed out columns in Q1 and Q2 showed that there were no detections above project screening levels [during those sampling events in shallow groundwater]. The deep groundwater had no detections above PSLs in all three quarters of sampling. Gray dots on the figure indicate wells where there were no detections above PSLs. In Q3 there were detected concentrations above PSLs in the newly installed monitoring well, indicating that the well was installed in the correct location.

In Area B, 8 deep wells and 6 shallow wells were sampled and contained PFAS at concentrations above the PSLs. The results from Q1 through Q3 sampling at Area B were displayed in a table on the presentation slide. The table showed the minimum and maximum concentrations of PFAS compounds that were detected above the project screening levels (PSLs), which were listed in the right-hand column of the table. The concentrations seemed to have variability between quarters, but when comparing well-to-well, concentrations did not fluctuate much over the three quarters. Some of the fluctuation in the concentrations is due to the additional wells being sampled in Q2 which added variability.

Additionally, a new analyte (perfluoropropanoic acid [PFPrA]) was added [for Q3]; during the first and second quarters the lab only analyzed for 40 PFAS compounds. During Q3, the lab ran 44 PFAS compounds, and PFPrA was one of those newly added compounds. It was noted that the deep groundwater well near the [Red Hill] shaft was also tested and there were no detections above PSLs during any of the three quarters.

The next step is to complete the Q4 groundwater monitoring event, which is currently ongoing. Additionally, the Navy has been collaborating with the regulatory agencies on this project and a scoping meeting is scheduled with the EPA and State of Hawaii Department of Health (DOH) to discuss the path forward for this remedial investigation. New data has further developed the conceptual site model, and the Navy is planning to meet with them [the EPA and DOH] to discuss the updated conceptual site model and proposed sampling. The Navy continues to work toward finalizing the work plan; completing field activities, including well installation and soil, groundwater, and sediment sampling; and preparing the remedial investigation report.

Ms. Rangel indicated that for more information, attendees could visit the ERN website for Red Hill and the Safe Waters website, which has more information on Red Hill in general. QR codes in the presentation provided access to these two websites for attendees.

Ms. Rangel visited the current ERN Program at Red Hill website to show attendees where these results, as well as the draft work plan and community involvement information, can be accessed.

Ms. Rangel concluded her presentation, and Ms. Kawasaki opened the floor for questions from the RAB.

C1: (Ms. Pcola-Davis) Can you scroll down to the bottom of that page and click on laboratory validation reports? And then click on one that you can open. My point is that these are not useful for anybody that is in the public unless you understand everything that is in these reports. There are some that require you to print them out to review them because they are PDF files. Yes, we have the information and it is there, but maybe it is not useful information. If you can create a portion of the safe drinking water site that shows the information similar to what that [site] shows, it will benefit everybody, unless all of you know how to read all of these lab reports.

C2: (Ms. Rangel) Ma'am, I agree, they are very complicated to read, and that is why we have this data summary sheet that summarizes everything. We are still working on Quarter 2 and Quarter 3 data summaries. If you continue to scroll down, we have a summary of all the results in the table.

C3: (CAPT White) I want to address this very issue. A year ago, when we started this, people had to go to the libraries to look for this type of information. The RAB members and the public present said we would like to have it accessible in some fashion, so we gave you this. I am not saying that you are not correct on this. The summary addresses it in plain language. However, if we do not give you the PDF that has the raw data then we are not being transparent. You should not just read my or her explanation or interpretation of the data. You should have access to both the raw data and the explanation, and you should see for yourself where that information comes from. Now you may not be able to relate the two, but somebody else might and that is why it is important that we have the source data and the summary.

C4: (Ms. Pcola-Davis) I am finishing my point. So, the lab results are one thing, and thank you for showing this part, because this is where I was going, but you definitely explained what this is for. So [for the public] do not get thrown off by clicking on that bottom link and going "what the heck is this," when you can go to the data summary.

C5: (Ms. Tamashiro) Can you go to one of the data validation reports? If you scroll through this report, what it tells you is that we had an independent party look at all of the quality control procedures that the laboratory followed to produce those concentrations that they detected. They check to make sure that the laboratory followed all the procedures that were established by EPA. As you go beyond this summary portion, there is a table that has a summary of concentrations and what the actual values are. Those numbers are what we put in the data summary table. So, you will have the actual concentration shown in the table in each data validation report, you just have to know how to read the report. I understand it is complicated.

C6: (Mr. Curtis) I think you are right, it is really critical that we have documents in English, and as CAPT White pointed out, one thing the RAB asked for is to have all documents also electronically so we can download them. The other thing pointed out is the RAB asked if we have one website where we can access all the documents. I think this represents two of the three. One is electronic, two is one website. But you're right, we need documents in English also.

C7: (Ms. Pcola-Davis) If you go back to the homepage to where the documents are—I'm not trying to pick this apart because I love this site—the site needs to be populated. This one in particular has a search engine for Red Hill and you have to know what you are searching for. It is another "do I know how to find things?" It needs to be populated with information that is relevant for the time.

C8: (CAPT White) You are making a very valid point, but especially being a member of the RAB, as we explain this, you will know what you are looking for and this is the whole idea for us to explain to people what they need to look for. If there is a mechanism we can do to make it better, more digestible, give us that information.

C9: (Ms. Pcola-Davis) I hear you. I am just letting everybody know that I have been on this site quite a bit and I am bringing up some of the items on the Red Hill facilities side of [the] site that needs to start getting populated a little bit more.

Q1: (Ms. Pcola-Davis) Do the RAB members always ask questions first?

A1: (Ms. Tamashiro) Yes.

Q2: (Ms. Pcola-Davis) On page 3 of your presentation, the color coding that you use for the printouts that we get do not look like that [the presentation on screen] so it is very hard to see yellow or the light orange. Could you consider changing your color scheme?

A2: (Ms. Rangel) Yes, ma'am, for the next RAB we will make sure to update the color scheme so it is more clear between the property boundary and our investigation boundaries.

Q3: (Ms. Pcola-Davis) On page 5, would you be able to identify the dots and the wells with their numbers? It is very hard to see the green, blue, or gray. It looks the same to me.

A3: (Ms. Rangel) We can adjust those to have more contrast in colors.

Q4: (Ms. Pcola-Davis) These are kind of confusing for me. Is there a reason for the use of gray and green? My knowledge of using green is good and red is bad, and gray is—I do not know. Maybe if you use a color-coding legend on the bottom that would help.

A4: (Ms. Rangel) We can add those for the next presentation.

Q5: (Ms. Pcola-Davis) On page 8, the colors that I am mentioning are the same colors that all look alike for people with color challenged eyes. It would help if you take that into consideration.

A5: (Ms. Rangel) Thank you. I appreciate your feedback so we can continue to improve the presentations in general.

Q6: (Mr. Lau) Thank you for the presentation. Are you going to do soil samples above both the shallow groundwater and the deep groundwater?

A6: (Ms. Rangel) Yes.

Q7: (Mr. Lau) In both areas?

A7: (Ms. Rangel) Yes, in both areas. That is in the current draft work plan. We are in the process of adjusting the work plan to add more soil samples based on the results we have seen and will adjust some locations.

Q8: (Mr. Lau) When do you plan on putting some results out?

A8: (Ms. Rangel) We are going to be meeting with EPA and DOH because we have not sampled any soil yet. We are meeting with EPA and DOH next month to discuss and come up with a joint path forward that we all agree upon. There are some areas that we are going to be changing and focusing on. I cannot tell you the exact date of when we will be able to sample and when we will get those results, but we will have an update for you at the next RAB meeting.

Q9: (Mr. Lau) Thank you. The other question I had was that Area B is a pretty large area and you have gotten many detections there, both in deep and shallow groundwater above the screening levels. Are you going to expand the investigation outside the property lines to see if contamination is outside the property?

A9: (Ms. Rangel) Again, that is part of what you may see in the next work plan. We are still looking at revising our sampling approach based on the results that we do have. Once we meet with the regulators, have a clear path forward, and update our work plan, we will be able to see where we are going to be sampling. And then provide any comments if we feel like we need to adjust our sampling areas.

Q10: (Mr. Lau) I noticed many green dots in Area B; it looks like it is around the Oily Waste Disposal Site (OWDF). Is that correct?

A10: (Ms. Rangel) Yes.

Q11: (Mr. Lau) I noticed here, detections from Q1–Q3, for example PFPA, the numbers are high all around in the shallow groundwater. PFHxA [is] high at all levels. You also have detections in deep groundwater above the screening level too. I strongly recommend expanding the investigation. As part of an RCRA investigation, there are more monitoring wells the Navy has installed outside of the property. Are these being included in your investigation?

A11: (Ms. Rangel) We are evaluating all existing monitoring wells where we decide to sample, but we are also looking at potentially installing new wells that are closer to our plume based on the concentrations. Also, we are looking, because we do have some data gaps, and we are trying to fill them in. Again, this is only an expedited approach. We only have these four quarters. There is still a lot of investigation to do. You will see us identifying those data gaps in the next work plan that comes out, and then how we plan on filling those data gaps.

Q12: (Mr. Lau) Do you already have a preliminary conceptual site model (CSM)?

A12: (Ms. Rangel) We have one, but the preliminary CSM was produced prior to any results coming in, so once the results started coming in, we needed to incorporate this information and adjust our approach and CSM moving forward to make sure we do not miss anything in the investigation.

Q13: (Mr. Lau) In your revised plan, do you anticipate actually finding a preliminary plume?

A13: (Ms. Rangel) Again, we cannot identify a preliminary plume because there are still many data gaps, but we can discuss where we need to sample to figure out where the plume is.

Q14: (Mr. Lau) Given the concentrations here which are quite high, where do you think this PFAS contamination emanated from? Was it strictly AFFF? When Jocelyn Tamashiro shared this project it was focused on AFFF at Red Hill and now it looks like could it be beyond just AFFF.

A14: (Ms. Rangel) Again, we only have this data to go by and we are still evaluating it and waiting for that fourth quarter so I cannot say for sure what the exact source is. We have no documented sources, especially in Area B, which is one of the questions we are working on trying to answer at this point.

Q15: (Mr. Lau) So there may not be a historical source?

A15: (Ms. Rangel) Again, with PFAS, you are looking at thousands of compounds of PFAS that are in existence. You are looking at sources that are everything from Teflon tape that existed in the 1950s to AFFF. We cannot at this point—because we have no documented sources—pinpoint exactly what the source is. We are trying to determine if there is a source in the area. That is one of the questions we are trying to answer in the remedial investigation. It is not something we are blowing off; we are focusing on trying to answer those questions. We are working with EPA and DOH to make sure everyone is in agreement with the approach to answer those questions.

Q16: (Mr. Huber) I would like to know how long the monitoring, all the shallow monitoring wells and deep groundwater wells, will be going for CERCLA data and its completion.

A16: (Ms. Rangel) At this point, we are only doing the four quarters of groundwater sampling. Then, in the remedial investigation, once we have installed all the wells, we will have two different sampling times. We will have the initial sampling, then 6 months later, we will have a second round of groundwater sampling with all of the wells. Again, this is one of the agreements we have reached with EPA to get a better understanding of what is currently going on within the property boundary.

Q17: (Mr. Huber) Will you be working with EPA at a later date to continue any further groundwater testing should it be needed?

A17: (Ms. Rangel) That is something we would need to work through during the scoping meetings if there is something else we need to do or any other expedited work that we can do while we are still working on finalizing the work plan.

Q18: (Mr. Huber) That is a possibility, should it arise?

A18: (Ms. Rangel) That is a possibility, should it arise.

Q19: (Mr. Inouye) Is there a master plan that is laid out? In 20 years, can you identify what the goal is at the end? Obviously, we want clean water and no substances. But we need to have a goal in writing.

A19: (Ms. Rangel) The goal in our work plan is the goal for the remedial investigation. We are trying to determine nature and extent, and if there is any risk to human health or the environment. Those are the main goals for the remedial investigation. If at any point there is an immediate risk to human health or the environment, we will work on an interim action to clean up that area that is an immediate risk to human health or the environment.

Q20: (Ms. Gorman-Chang) On page 4 it says, "underlying layer of soil and rock that limits the downward flow of shallow groundwater." Is that consistent across the island? Would the groundwater flow model from University of Hawaii (UH) give us any idea about that? It sounds like [the underlying layer of soil and rock] limits it but it is possible that it could still contaminate [the basal aquifer].

A20: (Ms. Rangel) This area is very complicated geology-wise. Just in the shallow groundwater it is extremely complicated. In Area A, we have this shallow groundwater well here, and we were going to put a shallow groundwater well here, but there is no shallow water. Look at how close they are; they are probably 150 to 200 feet away from each other. That is just a snapshot of the complexity of this shallow water within the boundaries of this facility. Once we have the full work plan you can see what the complexity is like in Area B. We have a 2-hour spiel with EPA and DOH just to discuss that groundwater modeling that you mentioned with UH. Again, groundwater modeling has been going on in the area for years. That is something we are taking into consideration for this project.

Q21: (Ms. Gorman-Chang) Can you discuss where the project screening levels come from and what they mean? Do they have any relation to human health?

A21: (Ms. Rangel) The simple answer is that we get these PSLs from DoD policy which you can find online. When EPA releases their Regional Screening Levels (RSLs), DoD looks at them and evaluates how they came up with the RSLs and then releases their policies based on the RSLs.

Q22: (Ms. Gorman-Chang) So does that mean DoD can deviate from what EPA releases?

A22: (Ms. Rangel). The short answer is no, but if there is an RSL that we cannot meet, they might have an alternative. For example, because we are looking at parts per quadrillion in some of the RSLs

and how low the labs have to go, sometimes they cannot get the detections that low, so we have to have some alternative values associated with those. This is spelled out in the DoD policy when we need to use those. My suggestion is to read that DoD policy if you are really wanting to get into the details of where these PSLs come from.

Q23: (Ms. Gorman-Chang) And we can find that where?

A23: (Ms. Rangel) You can Google "DoD PFAS Policy" and it should pop up right from the Office of the Secretary of Defense website.

Q24: (Mr. Helelā) I wanted to call back to Ernie's question. Forgive me if it was already answered, but it sounded like he wanted to know specifically about testing outside of the property boundaries and I did not get that answer. Is there a plan to do that? Particularly when you have concentrations along the border.

A24: (Ms. Rangel) In the current work plan that is posted on the website we do not look at going off--base. However, we are looking at a revised approach, working with EPA and DOH, to see if that is something that we need to be doing and should be doing as the next step as part of this work plan. We will be discussing that during our scoping meeting. At this point, we do not have any confirmed locations. It is in discussion. We are not excluding it; it is just that the current work plan is based off the older conceptual site model and we have not worked with DOH and EPA on updated sampling locations yet.

C10: (Mr. Helelā) Mahalo, it just seems like a time for all hands on deck and all agencies. I hope you can work with UH.

C11: (Ms. Rangel) We are using UH's plan. We are working closely with the Navy team that worked with UH, so they do have an agreed upon groundwater model from my understanding. We are not excluding anything, and we are working closely with everyone because we are a team. Just like how you are part of our team for this project as members of the RAB, so are EPA and DOH.

Q25: (Ms. Lin) I had a question about the Area A shallow groundwater well on slide 7. What is the depth of that shallow well?

A25: (Mr. Heidner) It is screened from 35 feet below ground surface (bgs) to 65 feet bgs.

Q26: (Ms. Lin) Currently there is just one shallow well? Do you plan on installing multiple?

A26: (Ms. Rangel) We just installed them and just got the results so we are looking at where there could be more shallow water that we could sample. Again, looking at this figure [slide 7] here there is no shallow water; here, there is shallow water, and then there are other limitations especially near the roadway due to high voltage lines. We cannot sample in some of the locations that you would think we could because we have the high voltage overhead lines limiting us.

Q27: (Ms. Lin) You mentioned during the Q1 through Q3 sampling for Area B initially that it was 40 PFAS screened and you changed it to 44 PFAS in Q3. What triggered that change?

A27: (Ms. Rangel) We ended up changing labs, so the lab was certified to analyze 44 compounds. During Q4 we will have 50 compounds.

Q28: (Ms. Lin) Did you switch labs again?

A28: (Ms. Rangel) Yes.

Q29: (Ms. Lin) Is that a common practice?

A29: (Ms. Rangel) No, it is not. The Navy needed to at the last minute. The samples had already been collected when the Navy needed to switch labs. It has to do with the laboratory's certification. The Navy only uses ELAP-certified labs, which is the DoD accreditation that says you can consistently run these analyses per the lab methods. I am trying to simplify it so it is not as technical and easier to understand, so I am not trying to avoid the question. After we collected the samples during Q3, the lab lapsed on their accreditation, so we were forced to switch. Once they got their accreditations back, they were able to analyze for more constituents than before, which is why we switched back. But it is very uncommon that during a sampling program you have a lab lapsed on their accreditation.

Q30: (Ms. Lin) Thank you. Following up on what Ernie mentioned on the potential source for the PFAS, I know you said you are not too sure as of right now. Do you have a list of past disposal materials from the former OWDF you can reference that may have contributed to the high levels of PFAS detections?

A30: (Ms. Rangel) In regard to the former OWDF, they did not use any or have any waste that was known to have PFAS in it. We have had no documented releases in this area, so there have been many more questions about where these results have come from which is why it is a big data gap for us that we are trying to answer.

A31: (Ms. Lin) Are you folks aware that DoD produced a report listing critical PFAS materials that are being used by military installations across the nation?

A31: (Ms. Rangel) Yes, we are aware, and we have looked at that. There has not been anything documented in this area that had any of those [materials].

C12: (Ms. Lin) I have a suggestion for the ERN website. I know you mentioned that this site is supposed to provide a location for all the information, all the testing results, and data. One suggestion I have is to put past minutes and information shared in the meetings. Currently, there is nothing on there. For actual RAB meetings, I was trying to look up information for today's meeting such as the agenda and things like that, but they were not on the website. I would highly recommend putting a page on there so it is centralized for everything.

C13: (Ms. Rangel) Okay, thank you for the feedback.

Ms. Kawasaki paused to ask the RAB to remember to leave time for questions and comments from the public. Mr. Curtis reminded Ms. Kawasaki that three RAB members have not had the opportunity to ask questions.

Q32: (Mr. Kajihiro) In Area B—I know you had a list of PFAS detected and you are trying to figure out the sources. Given that list, does it suggest signature of any types of chemicals that would have this or is it pretty ubiquitous?

A32: (Ms. Rangel) One of the things that we are trying to do is use fingerprinting because there is a list of different materials that have PFAS, what compounds, and things like that. So, we are working on fingerprinting and trying to determine if we can find what the source is, but it is a long process.

Q33: (Ms. Takemoto) Because this report you are preparing is for a remedial investigation, one purpose of a remedial investigation is to figure out the extent of the contamination. If you are just staying within the borders of the property lines that does not fulfill the requirement of a remedial investigation.

A33: (Ms. Rangel) Yes, as I stated, in the current work plan that is what we have. We are working on other locations with EPA and DOH, but I do not want to disclose that right now because we have not had any agreements and they have not seen where we would like to sample. We are looking at going offsite.

C14: (Ms. Takemoto) I want to point that out because that is the purpose of a remedial investigation. You have already done the site inspection and found the areas. In order to fulfill the CERCLA requirement under a remedial investigation, you have to determine the extent of contamination and that has not been done.

A15: (Ms. Rangel) That is going to be in the next revised work plan as I said. We have the current draft work plan, but it has drastically changed. We have not yet worked with EPA and DOH to figure out an approach where we are all in agreement.

Q34: (Ms. Takemoto) When you do the sampling are you going to have to go onto private property or go to government property? Is that one of the limitations of the work plan?

A34: (Ms. Rangel) No, we do not look at whether it is private or government property when we look at locations. We look for any limitations of where the drill rig can be positioned. That is a huge limitation because it is a massive drill rig. We also look for overhead lines because of the height of the drill mast. Those are the types of limitations we look at; we do not look at whether it is private property or not.

Q35: (Ms. Takemoto) The BWS detected PFAS/PFOA in their water. Have you looked at some of the areas where they were detected? Is it possible the plume goes there? Have you checked the BWS data to see how it marries up or if it could be from the same source?

A35: (Ms. Rangel) We are using a data-driven approach, so we will be starting with the area where we have collected samples and then expand from there, rather than reaching out all over the place. There are so many different sources of PFAS that if we go all over the place there could have been something that was introduced from some other entity that we do not know about. For example, the fire department could have put out a car fire and used AFFF. We would have no record of that. We are using a data-driven approach and are working our way out. It is not that we are not going offsite, it is just that as of right now these are the wells that we have sampled for the first four quarters. When we work with DOH and EPA, we will work on figuring out where we need to sample to figure out what the extent of the plume is.

C15: (Ms. Takemoto) My point is that there are a lot of data by the BWS which might help you refine some of your work plan. I am not just saying a car fire here or there, or a house fire. I am saying there are missing data and they picked up PFAS in their water. It might be good to look at their data to see if your work plan would be reasonable and if you should go out that far. I am suggesting that it is a very good source instead of drilling random wells and not finding anything.

Q36: (Mr. Curtis) Are the RAB members okay with extending this meeting by 15 minutes so we can complete this?

A36: (CAPT White) No, we must stick with the 2000 hours. That is the set time we have had. There has to be responsibility. Henry, if someone wants to take 15–20 minutes and not give the public a chance, that is fine, too, but we need to police ourselves. We need to end at 8:00 p.m.

Q37: (Mr. Curtis) Helene, was that a suggestion or a motion for the board to make?

A37: (Ms. Takemoto) Right now I am suggesting it because they are still in the draft and doing the remedial investigation.

C16: (Ms. Rangel) A lot of what the RAB is saying is what we will be approaching with DOH and EPA. I think when we meet at the next RAB meeting, we will have more of these answers for you.

Mr. Curtis stated that there can be one more question from the RAB.

C17: (Ms. Takemoto) Rather than the RAB members Google the document for the DoD policy on PFAS, can you please place it on the website that is available to us so that we can access it when we can? Thank you.

Ms. Kawasaki asked if there were any questions from the audience. There were none, and Ms. Kawasaki asked if there were any questions from audience members attending the meeting online.

Q38: (Ms. Townsend, online) Who decides what an urgent risk is to human health and the environment?

A38: (Ms. Rangel) We look at what results we get and then depending on what the potential receptors are it needs to have a complete pathway and receptors. For example, if we are looking at surface soil that has a high PFAS concentration and we know there will be construction workers coming in, that is going to be considered a human health issue and we would look at trying to clean that up. We have receptors, a pathway, and a known contamination.

Ms. Kawasaki introduced one question from the audience.

Q39: (Ms. Dani Espiritu) If PFAS is considered a forever chemical that will not biodegrade, why are we putting a timeline on that if it is going to continue to move in the aquifer and appear in other areas that are unknown? It does not make sense to me why we would not address something through remediation, even if today there is no clear pathway, but 10 years from now, 50 years from now there will be. The question is what are we doing about it?

A39: (Ms. Rangel) We do not have any clear pathways to trigger a response based on the [information that] we currently have. All our highest concentrations are in the shallow groundwater where there is no drinking water source. We are looking at 30 to 60 feet below ground surface. So there is not that immediate pathway to trigger [a response] based on where we are seeing our highest concentrations.

Q40: (Ms. Espiritu) Within this process, as long as there are no clear pathways within this set amount of time you are going to wash your hands of it and be done? Can you explain what the follow-up looks like for the general public?

A40: (Ms. Tamashiro) We definitely will not be walking away from the problem. Our process is to follow CERCLA, and CERCLA defines the work that we do as identifying the source and how far it goes horizontally and vertically, determining what kind of risk it poses to human health and the environment, and then basing a cleanup or remedial action on that risk assessment. We must follow

this process. It is followed across the country and we do not deviate from it. It does take time to go through everything but we are definitely not walking away from our responsibility to clean up the environment.

CAPT White followed up with Ms. Espiritu to confirm if her question was answered.

C18: (Ms. Espiritu) Not entirely. You may be following the process, but it does not make sense to me to say there is no health or environmental risk if you live on an island and almost every source of our rivers and our streams that end in our oceans come from the aquifer. So, we are not just talking about drinking water, we are talking about everything that the water touches. I help to maintain a loi that is directly affected by this. Within 10, 20, and 50 years, will we have PFAS coming out of the streams that feed the farm? Based on this meeting, I have gathered that there is no certainty we are going to test beyond these boundaries then. "Oh well" is what it seems like to me, in response to Ernie and Hanaloa's questions. It seems like there is a monitoring process for a very short amount of time for a chemical that never disappears and that does not make sense to me.

C19: (Ms. Tamashiro) That is noted in the minutes. Thank you for your comments and concern.

VII. CLOSING

CAPT White summarized what was accomplished during the meeting, including signing the RAB charter, doubling the size of the RAB, and discussing some important topics. He noted that next time the RAB will need to leave more time for the public to ask questions and comment on the presentation.

Mr. Curtis thanked attendees for coming, invited them to the next meeting in January, and closed the meeting at 8:00 p.m.

For additional information, please contact:

Public Affairs Officer, Code 09PAO Naval Facilities Engineering Systems Command, Hawaii (NAVFAC Hawaii) 400 Marshall Road JBPHH, HI 96860-3139 (808) 471-7300 Email: NFHI PAO DL@us.navy.mil

Project reports discussing environmental investigation and restoration efforts that were discussed tonight can be obtained from the following Navy information repositories:

Naval Facilities Engineering	University of Hawaii at Manoa	Pearl City Public Library
Systems Command, Pacific	Hamilton Library Hawaiian	1138 Waimano Home Road
258 Makalapa Drive, Suite 100	and Pacific Collection	Pearl City, HI 96782
<i>JBPHH HI 96860</i>	2550 McCarthy Mall	Tel. (808) 453-6566
Tel. (808) 472-1428	Honolulu, HI 9682	
	Tel. (808) 956-8264	

ATTACHMENT A

LIST OF ATTENDEES

PEARL HARBOR-HICKAM-KALAELOA RESTORATION ADVISORY BOARD (RAB) MEETING

OAHU VETERANS CENTER, HONOLULU, HAWAII

August 27, 2025

			9		
1.	Audrey Asahina	28.	Sriram Madabhushi	55. Han	na Zheng
2.	Kat Brady	29.	Bill Manley	56. Mal	ia Zinn
3.	Christy Bray	30.	Kim Markillie		
4.	Travis Brinkman	31.	Susan Pcola-Davis		
5.	Lynn Brockway	32.	Michele Pearson		
6.	Maverick Carey	33.	Carrie Plath		
7.	John Chesnutt	34.	Sherry Pollack		
8.	Rebecca Crall	35.	Cody Pyard		
9.	Brian Crone	36.	Charlotte Rangel		
10.	Henry Curtis	37.	Keala Richardson		
11.	Mike Dau	38.	Steve Sahetapy-		
12.	Karen Davis		Engel		
13.	JoAnna Delfin	39.	Ron Shimabuku		
14.	CDR Dunn	40.	Ellie Shimatsu		
15.	Dani Espiritu	41.	Tara Sutton		
16.	Susan Gorman-	42.	Helene Takemoto		
	Chang	43.	Jocelyn Tamashiro		
17.	Colonel Gregory	44.	Janice Toma Shiira		
	Hammond	45.	Marti Townsend		
_	Niels Heidner	46.	Bryceson Tugade		
19.	Hanaloa Helelā	47.	Belinda Turran		
20.	Robert Huber	48.	Cruz Vina Jr.		
21.	Guy Inouye	49.	Matthew Ward		
22.	CMDCM Jeff Jones	50.	CAPT Samuel White		
23.	Kyle Kajihiro		Robin White		
24.	Stephanie Kawasaki		Francie Whitfield		
25.	Jeni Larson		Kalamakū		
26.	Ernie Lau		Woodward		

54. Dayna Yoshizaki

27. Joyce Lin