MINUTES OF THE

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

ALIAMANU MIDDLE SCHOOL, HONOLULU, HAWAII

June 26, 2024

I. ATTENDANCE: SEE ATTACHMENT A.

II. OPENING

Ms. Stephanie Kawasaki, facilitator of the meeting, opened the meeting at 6:00 pm and introduced Captain Mark Sohaney, Commanding Officer of Joint Base Pearl Harbor-Hickam (JBPHH). Captain Sohaney thanked everyone for attending and introduced himself and his replacement, Captain Sam White.

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

Mr. Kawaikapuokalani Hewett introduced himself and shared a blessing for the meeting.

Ms. Stephanie Kawasaki introduced herself and presented the structure for the meeting, including time allotted for questions and comments. Ms. Kawasaki introduced Jocelyn Tamashiro, Environmental Restoration Manager at Naval Facilities Engineering Systems Command (NAVFAC) Hawaii.

Ms. Jocelyn Tamashiro introduced herself, asked RAB members to introduce themselves, and introduced attendees from Hawaii Department of Health (DOH) and Environmental Protection Agency (EPA).

III. SCHEDULING OF QUARTERLY MEETINGS

Mr. Curtis proposed that there be four RAB meetings held each year, one per quarter, and asked the RAB members if they can meet on the fourth Wednesday of September 2024 and the second Wednesday of December 2024. There were no comments or objections; therefore, the meetings were scheduled.

IV. COMMUNITY INVOLVEMENT PLAN AND RAB MEMBERSHIP

Ms. Tamashiro explained that the Navy's Community Involvement Plan for the Pearl Harbor area is several years old and needs to be updated. A handout containing an updated summary of projects discussed at previous RAB meetings was available at this evening's meeting, and it included a QR code that links to an environmental concerns survey for attendees to complete. Ms. Tamashiro asked attendees to complete the survey to help the Navy better understand the community's concerns.

Ms. Tamashiro explained the process for becoming a RAB member. Mr. Curtis explained that the current charter allows up to 20 members to be on the RAB, the Military Co-chair is selected by the military, and the Community Co-chair is selected by the community members of the RAB. Anyone interested in applying should fill out an application and send it to Ms. Tamashiro. The Navy will review applications and make recommendations to the RAB. Only the community members of the RAB vote on who joins the RAB.

V. DISTRIBUTION OF DRAFT RAB CHARTER

Ms. Tamashiro explained that previously, there were separate RAB charters for Pearl Harbor and Hickam, but now that it is a Joint Base they will be combined under one RAB charter. She stated that the draft charter will be distributed to the RAB members for their review. Ms. Tamashiro requested that the RAB members review the draft charter and prepare comments in time for the September 2024 RAB meeting.

VI. DISCUSSION OF SITE VISIT TO UNEXPLODED ORDNANCE SITE 2 (UXO 0002), NAVAL DEFENSIVE SEA AREA

A site visit to UXO 0002, Naval Defensive Sea Area was scheduled for Saturday, June 29. Mr. Curtis scheduled the site visit for 9:00 a.m., and the site visit will be led by Ms. Carrie Plath, Remedial Project Manager (RPM) for Site UXO 0002.

V. TECHNICAL PRESENTATIONS

***Land Use Control Implementation for Unexploded Ordnance Site 2 (UXO 0002), Pearl Harbor Naval Defensive Sea Area, Joint Base Pearl Harbor-Hickam* – Ms. Carrie Plath, NAVFAC Hawaii**

Ms. Plath introduced herself as the RPM for the UXO 2 site, located within the Naval Defensive Sea Area (NDSA), JBPHH. Slides 2, 3, and 4 presented a brief outline of the presentation and a map of the site location.

UXO 2 is a submerged Environmental Restoration site that includes 1,933 acres within the NDSA and is located 0.58 mile from the shoreline. Historical uses of the site included southern shoreline defense and training from the early 1920s until 1948. Munitions included 1.5-inch to 12-inch projectiles, 12-inch mortars, and 16-inch high explosive projectiles. Access to UXO 2 where munitions have been identified is restricted and controlled by the Navy to protect the public. In 2010, a Preliminary Assessment was conducted that confirmed training locations and potential for munitions items at the site. In 2011, a Site Inspection confirmed the presence of munitions at the site. Site boundaries were also refined. In 2014, a Remedial Investigation (RI)/Feasibility Study (FS) was conducted, which developed a mobility model for munitions transport scenarios, evaluated risk and potential hazards, and reviewed alternatives for future site actions. A remedy was selected in the 2019 Decision Document, which included maintaining land use controls (LUCs), which are mechanisms that restrict the use of or access to an area to prevent exposure to hazards.

The objective of current activities is to prevent interaction between people and underwater munitions through LUC areas and education with public outreach regarding the restricted areas. Munitions items are present and are unlikely to migrate. Planned activities to prevent interaction between people and underwater munitions include access restrictions, signage, and educational materials, and proposed activities include activity restrictions (such as restricting fishing activity) and updated nautical charts. Slide 9 presented examples of these planned and proposed activities.

Next steps in maintaining the selected remedy scheduled for 2024 include a Work Plan for LUC Implementation, the June 2024 RAB Meeting, a Five-Year Review, Public Meeting/Community Outreach, and a Remedial Action Completion Report, which will document when the remedial action objectives have been achieved for a site.

Question 1 (Q1): (Mr. Huber) Has there been any communication with the State of Hawaii for publication of site information in the state fishing guide brochures?

Answer 1 (A1): (Ms. Plath) Not yet, but this is something else that the Navy can discuss internally and for future planning and site management.

Q2: (Mr. Kajihiro) Are these federal or state-ceded lands?

A2: (Ms. Plath) These are federal lands and are managed by the Navy for the purposes of defense.

Q3: (Mr. Kajihiro) Do you know how they were acquired? Most submerged lands are state-ceded lands.

A3: (Ms. Plath) There is an Executive Order for all NDSAs, which are located in the Pacific, the west coast, and the east coast.

Q4: (Mr. Kajihiro) Why was the decision made to use institutional controls versus removal actions?

A4: (Ms. Plath) Munitions that have been found have been there for a very long time and are embedded in the reef. The effort to remove munitions would be detrimental to the reef in those areas. Until there is access to better technology and better field methods to remove the munitions, the current remedy is the best option to protect the reef and the public.

Q5: (Mr. Kajihiro) Have you looked at the decay of the munitions and what those environmental effects may be? At Waianae, they were getting the dinitrocellulose washing up. Is anything like that happening here?

A5: (Ms. Plath) The Site Inspection also sampled for munitions constituents in reef sediment, fish tissue, and water, and sample results (i.e., chemicals of concern) were reported as non-detected.

Q6: (Community Member) Are there any kind of notifications or notices posted that educates the community about the impact to food that might want to be collected in that region, whether it's onshore or offshore if the contamination may be spreading? So not just from fishing, but also maybe collecting limu or anything else?

A6: (Ms. Plath) No, that's not posted, because the area we are prohibiting is the Land Use Control area of UXO2, the boundary shown on the map. Anchoring, diving, or moving objects is the real hazard. The sampling results concluded that there are no risks to eating fish caught in the vicinity based on the UXO 2 contaminants of concern.

Q7: (Ms. Townsend) How long is this decision going to last? If we wanted to change our mind and we didn't want the Navy to control this water and we didn't want to have ordnance leeching into the reef, how long? When can we revisit this decision? Is new technology being investigated now for removal of the ordnance? The current state is unacceptable so I want to know when we can change it.

A7: (Mr. Curtis) Life of the Land has been examining the whole southern coastline of Oahu, not just for military land, but also for proposals to bring in telecom lines and transmission lines and other things. The issue right here is there is no leakage occurring right now, and the greatest damage is either somebody disturbing it while fishing or trying to remove it from the reef. That would do far more damage than leaving it in place. It would be very different if we knew that these were leaking, but as far as we can determine, there is no leakage, so it is better to leave them in place.

Q8: (Ms. Townsend) When can we revisit this decision? Say, in 20 years, if new technology has been developed.

A8: (Mr. Curtis) We are always looking at new technologies, but as of today, the best thing is to leave it in place.

Follow-on Comment 1 (C1): (Ms. Takemoto) They (the Navy) are required to do a Five-Year Review. As part of a Five-Year Review, they look at if the decision made in the Decision Document is still valid, and if there's any leakage. There is other technology to determine if there's leakage, such as a sediment blanket on top of the ordnance and get real-time analysis. Maybe in five years, the alternative picked may no longer be valid or technology may have changed or there could be a tsunami that moved all the ordnance.

Q9: (Ms. Gorman-Chang) What is the communication plan for Kapilina Beach Homes? People are always filing in and out, some military, some not; how will they be informed on an ongoing basis?

A9: (Ms. Plath) I've been in contact with the property and community managers there and we'd like to provide flyers for when people sign leases. There is signage at the beach as well.

Q10: (Tara) Do you realize that continuing to train in Hawaii is not the answer? In 2029, the leases are up and you will need to leave and things will need to be cleaned up in five years.

A10: (CAPT Sohaney) For this particular site, this is not under any land use agreement that ends in 2029. Those lease agreements are for other areas in the Hawaiian island chain, so that does not apply to this particular presentation.

Preliminary Assessments and Site Inspections for Per- and Polyfluoroalkyl Substances (PFAS), Joint Base Pearl Harbor-Hickam **– Ms. Jan Kotoshirodo, NAVFAC Hawaii**

Ms. Kotoshirodo introduced herself as the RPM for the Preliminary Assessment (PA) and Site Inspections (SI) for PFAS for the areas covered by this RAB meeting. A brief outline of the presentation was presented on Slide 2, along with an outline of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process.

Slide 3 defined PFAS as a family of manmade chemicals with many useful properties, including resistance to water, grease, and/or stains, and as a firefighting foam. PFAS have been used in many products since the 1950s, but PFAS use has greatly reduced in the United States in the last 10 years. Slide 3 also defined aqueous film-forming foam (AFFF) as a foam used for firefighting, which is the most common use of PFAS within Navy operations.

Slides 4 and 5 introduced the objectives and approach for the PA. Objectives included identifying and evaluating potential or actual PFAS releases, eliminating areas where there is no evidence of a PFAS release or suspected release from further consideration, identifying areas requiring further PFAS investigation, and identifying how PFAS releases may impact the environment. The approach for the PA included reviewing facility records and maps, revising previous environmental investigations, performing site visits and personnel interviews, evaluating each location for potential PFAS use or release, and identifying and grouping potential areas of interest based on likelihood of PFAS impacts to the environment.

A map of the areas evaluated was presented on Slide 6; areas evaluated included Hickam Field, Pearl Harbor Main Base, Navy Housing Area, Makalapa Crater, Richardson, Camp Smith, Red Hill, Ford Island, Pearl City Peninsula, Waipio Peninsula, and West Loch.

Sites were grouped into the following groups: (1) Group A Sites, (2) Group B Sites, and (3) Group C Sites. Group A Sites are those with known releases (e.g., large quantity spills, crash sites, and firefighting training areas). Group B Sites are likely potential release areas (e.g., AFFF tanks with frequent filling activities or storage areas with historically poor housekeeping practices). Group C Sites are electroplating facilities. Electroplating is a process that potentially used PFAS-containing vapor

suppressants and surface coatings. A map of site groupings evaluated in the PA was presented on Slide 8, and a list of site groupings was presented on Slide 9. Some sites are listed in green text, indicating that they were evaluated as a site-specific PFAS investigation, and are therefore not included in the Installation-wide SIs.

Slide 10 presented the objectives of the SI. Objectives were based on PA recommendations and included: evaluating whether PFAS are present in surface soil, subsurface soil, or groundwater; and recommending whether any of the potential PFAS sites should be further evaluated in a RI. Recommending further evaluation of sites included relative sequencing of work for RIs; priority was based on potential for exposure and/or impact to the environment and regulator and public input. Slide 11 presented a map of the sites sampled during the SI.

SI field activities were presented on Slide 12 and included collecting samples from 11 site locations. Sampling included surface soil, subsurface soil, and groundwater. PFAS sampling procedures followed EPA guidelines, including trained staff and PFAS-free material and equipment. Samples were analyzed using EPA laboratory methods at certified laboratories.

The SI compared sample results to EPA screening levels, and soil or groundwater samples were above EPA screening levels at all 11 site locations. All 11 site locations were recommended for further evaluation in a RI. Slide 14 listed the site locations and included if soil or groundwater had exceeded EPA screening levels for each site.

A map on Slide 15 presented the status of current PFAS Investigation; blue squares indicated that a site is currently in the RI phase, and yellow squares indicated that a site is recommended for the RI phase. Slide 16 listed sites currently in the RI phase, with green text indicating site-specific PFAS investigations not included in the installation-wide SI. Slide 17 listed sites with planned RIs in 2025 and 2026 with relative sequencing based on potential impact to environment and regulator/public input.

Q1: (Ms. Takemoto) How deep did the soil sample at Camp Smith go?

A1: (Ms. Kotoshirodo) The soil sampling went to 8 feet.

Q2: (Ms. Takemoto) So did you find PFAS?

A2: (Ms. Kotoshirodo) We found PFAS present.

Q3: (Ms. Takemoto) You didn't go any deeper?

A3: (Ms. Kotoshirodo) Not for the Site Inspection. For the Site Inspection we were focused on identifying whether we saw PFAS or not, so the Remedial Investigation will take that next step forward.

Q4: (Ms. Takemoto) So the soil sampling will go deeper than 8 feet for the Remedial Investigation?

A4: (Ms. Kotoshirodo) Yes.

Q5: (Mr. Veray) Where can I get the results for the Pearl City Peninsula Site where there was the Former Tank 1 that blew up in the '70s and they used PFAS to put out the fire? Where can I get the results of that 2020 Remedial Inspection?

A5: (Ms. Kotoshirodo) We do have separate investigations being done for the former Pearl City Fuel Annex Site. We can maybe provide you with those documents. [person who asked the question acknowledged this could be discussed separately after the RAB meeting]

Q6: (Mr. Huber) Will the reports for all the AFFF used at the air facilities for training and for emergency purposes – will that be released to the public? Reports of the spills on the tarmac or onto the ground.

C1: (Ms. Kotoshirodo) To understand your question, you're asking on the reported spills that occurred on the taxiways?

C2: (Mr. Huber) Yes, any reports regarding the AFFF that had been used in any of those areas.

A6: (Ms. Kotoshirodo) We didn't find in our PA effort any evidence or records of spills in the taxiway areas on Navy or JBPHH property.

Q7: (Mr. Huber) What about for training using the foam?

A7: (Ms. Kotoshirodo) Well for training, we do have firefighting training areas at Hickam; those were tested, and we did find PFAS.

Q8: (Mr. Huber) So for my question, are those reports accessible to the public?

A8: (Ms. Kotoshirodo) Yes, the Final PA Report would have that information.

Q9: (Mr. Curtis) The former fuel storage area annexes, one in Waipio and one in Waikakalaua in Wahiawa – were those inspected for PFAS? For Air Force, the pipeline at Hickam.

A9: (Ms. Kotoshirodo) Based on our PA, we did not find any evidence or records related to PFAS for those storage areas or former storage areas.

Q10: (Mr. Curtis) The highest hit that I saw in the report was for 6:2-FTS, which is one of the classes of PFAS or forever chemicals that does not have a remedial screening level and therefore cannot be exceeded because it doesn't exist yet, but that was the highest hit. How are you handling 6:2-FTS?

A10: (Ms. Kotoshirodo) What was presented here is just the SI phase, which is really just the step of collecting the data, screening it, and continuing on to the RI phase, so really it would be in the RI phase where we look more closely at the different compounds. Also, the regulatory standards and criteria are constantly evolving for these PFAS compounds, so there is a high likelihood that that may change also, as far as which ones have screening levels.

C3: (Mr. Curtis) This one can't exceed it (i.e., the remedial screening level) because it doesn't exist yet.

C4: (Ms. Kotoshirodo) Right, and that site is moving forward so the RI will be quite a larger evaluation for PFAS.

Q11: (Mr. Kajihiro) I'm wondering if you looked at Kalaeloa as an airfield?

A11: (Ms. Kotoshirodo) We did, so Kalaeloa– if you look at the map in the back that has the Kalaeloa footprint, it's because there's a former Naval Air Station Barbers Point, which is a big piece of land, but since then there have been certain parcels that have been transferred, and there are some that have been Navy retained. For the current Navy property, the PA did not identify any PFAS locations of interest.

Q12: (Mr. Kajihiro) So the other areas would be under FUDS (i.e., Formerly Used Defense Sites Program) then?

A12: (Ms. Kotoshirodo) We have some managed under our Base Realignment and Closure, BRAC, program, but we still have some properties that are being managed. There are some other areas – I'm

not a total expert on Kalaeloa lands – but there's some that are managed under BRAC and some that were transferred in other ways.

Q13: (Mr. Kajihiro) What about Bellows, Makapu'u?

A13: (Ms. Kotoshirodo) Those were evaluated, we did not present them here because they are not in the footprint of this RAB. But the PA and SI were performed for all the Navy and Marine Corps properties in Hawaii.

Q14: (Mr. Kajihiro) So there is another process parallel to this that covers those?

A14: (Ms. Kotoshirodo) We have different reports, it's actually a combination of reports, that cover the different areas on both Oahu and Kauai, where we have the Pacific Missile Range Facility.

Q15: (Mr. Kajihiro) Do those also have RABs or public forums?

A15: (Ms. Kotoshirodo) Currently we don't have active RABs at the other locations, but if you're interested, similar to the other PA reports, we have Final PA Reports for each of those also.

Q16: (Mr. Kajihiro) Do the methods used to detect PFAS capture all the different varieties? Like with the fuel spill, there's some specificity to the different types of investigations you have to do to detect things.

A16: (Ms. Kotoshirodo) PFAS is similar in that there is an analytical method sent to the laboratory, and there are different PFAS compounds. Right now, similar to what Henry [Curtis] was referring to, where there are many compounds but there is only a subset with regulatory screening levels.

Q17: (Mr. Kajihiro) So you're not looking for the ones that are outside of those regulatory screening levels?

A17: (Ms. Kotoshirodo) No, we do have data for those also, we did collect the data because we anticipate things to keep evolving with PFAS. So it is possible that we may get more screening levels as time progresses, and the screening levels have been changing pretty often, about every 6 months or so. So we're going with that also with our investigations.

C5: (Mr. Hurff) To help out with that, there are EPA methods – the EPA methods that we use are EPA established methods for these specific PFAS compounds that we are looking for. There are thousands [of PFAS compounds]. But in the various methods there is a limited subset of that thousands that we use, and it is an EPA-approved method that while following the methods we have apples to apples comparisons across all our sites.

Q18: (Mr. Lau) At the Red Hill facility, it looks like you're focusing yourself on the 2022 event. What about the other events that occurred in 2019 and 2022? And what is the definition of the Red Hill facility, because its infrastructure and pipelines go all the way into Pearl Harbor too. Is that part of the RI?

C5: (Ms. Kotoshirodo) Your question was about Red Hill facility, but clarification of what locations we evaluated?

C6: (Mr. Lau) Yes, what is the definition of the Red Hill facility?

A18: (Ms. Kotoshirodo) So yes, we evaluated the entire facility. There's the main part where the tanks are up in Halawa Valley and the other parts that extend to the main base. This building 1613 and 1721, pump house foam station, that's on the main base, but it's at the far end, the very end, of the Red Hill facility, and that's where we do have a known release that occurred and that is being addressed under our program. As far as our PA, the only other area related to Red Hill that needed further evaluation

was Adit 6 and Building 313, which is going to be discussed in the next presentation. So those are the two areas related to the Red Hill facility that we are investigating right now under our program, but they are distinctly different geographically in terms of where they are on the map.

Ms. Kawasaki stated that further questions will be held until the end of the presentations.

***Red Hill Facility PFAS Remedial Investigation, Joint Base Pearl Harbor-Hickam* – Ms. Jocelyn Tamashiro, NAVFAC Hawaii**

Ms. Tamashiro introduced herself. Slide 2 presented a brief outline of the presentation along with an outline of the CERCLA process.

A map of the Red Hill Facility presented on Slide 3 showed Investigation Areas A and B, as well as the Red Hill Facility boundary.

Known historical AFFF sources within the Red Hill Facility included a 200-gallon AFFF above-ground storage tank (AST) installed in the 1960s and removed in 2008, and a new AFFF system whose installation was completed in 2018. On November 29, 2022, there was an accidental spill of 1,100 gallons of AFFF concentrate from the fire suppression system at Adit 6. As of May 2024, all AFFF had been removed from the Red Hill Facility.

In response to the 2022 spill, approximately 3,000 cubic feet of soil was excavated, and the area of excavation was repaved. This excavation was initiated within 2 hours of the spill. Confirmation soil samples were collected and analyzed for PFAS using EPA Method 1633. This method was approved by EPA in January 2024, measures 40 PFAS constituents, and is used for testing PFAS in soil and groundwater (non-drinking water).

Slides 6 through 8 presented results of the soil and groundwater sampling, as well as maps of sampling locations. No EPA Regional Screening Level (RSL; November 2023) exceedances in soil samples were observed, and regulatory agencies allowed for backfilling of the excavated areas after confirmation soil sampling. Six months of routine weekly groundwater sampling was conducted between November 2022 and May 2023, and six months of routine monthly groundwater sampling was conducted between June 2023 and December 2023. Sampling was conducted at 10 sampling locations. No PFAS were detected in groundwater above the November 2023 EPA RSLs. In September 2023, baseline groundwater sampling was conducted at 22 sampling locations. PFAS were detected above 2023 November EPA Tapwater PFAS Levels at 5 of the 22 wells sampled. Fingerprinting of the PFAS detected in the five wells with exceedances did not match the AFFF spilled during the November 2022 Adit 6 event. All data collected during the spill response are posted on the Safe Waters website[1].

Slide 9 presented the same map shown in Slide 3. Results of the spill response activities identified two separate Investigation Areas: Investigation Area A (area surrounding the 2022 AFFF spill) and Investigation Area B (area associated with the Red Hill Shaft [RHS] water pumping station).

Slides 10 and 11 presented two maps of Investigation Area A: one including locations of site features, and one presenting the sampling strategy proposed to regulatory agencies. The proposed sampling strategy included soil sampling locations, monitoring well locations, and two clusters of proposed new

[1] https://jbphh-safewaters.org

monitoring well locations for sampling. Ms. Tamashiro said that they will also be collecting samples from existing storm drains.

Slides 12 and 13 presented two maps of Investigation Area B: one including approximate locations of exiting monitoring wells, and one presenting the sampling strategy proposed to regulatory agencies. The proposed sampling strategy included two of three new Oily Waste Disposal Facility (OWDF) well clusters to be sampled for groundwater, three soil sampling locations where soil borings will be drilled and sampled for soil, and existing monitoring well locations for sampling groundwater.

Slide 14 presented a schedule for the RI. Currently, the Sampling and Analysis Plan is in progress. Field activities are scheduled to being in Fall 2024, with the Draft RI Report anticipated in 2026 and the Final RI Report anticipated in 2027.

Q1: (Mr. Curtis) I have a question, but I would like to first give two definitions: Kyle [Kajihiro] used "FUDS" – Formerly Used Defense Sites, and you used Adit 6, which I had to look up in a dictionary. It's a horizontal passage into a mine, or in this case, Red Hill. My question is on the map of Red Hill, where is the 2019 spill?

A1: (Ms. Kotoshirodo) It's on the Main Base. That is at the pumphouse/foam station, which is actually at the exit of the tunnels at a different adit, Adit 1, which is on the Main Base. It is at the very tail end of the facility. Buildings 1613 and Building 1721, if you look at the last presentation.

Q2: (Mr. Huber) I have a question for Ernie Lau. Has there been testing for PFAS, being so close, in the Halawa Shaft area at all?

A2: (Mr. Lau) Yes, we've been testing Board of Water Supply (BWS) wells for PFAS. We have consistently found it in our Halawa Wells. Remember we have three wells shut down, Halawa Wells, Aiea Wells, and Halawa Shaft. Halawa Wells consistently has, I think, PFOS [i.e., perfluorooctane sulfonic acid] at pretty detectable levels. Thank you for the question.

Q3: (Mr. Huber) There is Hawaiian Water is it? A water company, Hawaiian Water Company that bottles water.

A3: (Mr. Lau) Yes, in Halawa Industrial there's some water bottling companies. They use BWS water, treat it, bottle it, and sell it at a much more expensive price. With the closure of Halawa Shaft, that water is actually coming from Honolulu, probably our Moanalua Wells and headed backwards from the east to west to supply the Halawa industrial area. Moanalua Wells is still operating, and we are monitoring for PFAS on a monthly basis.

Q4: (Ms. Takemoto) Now that BWS does sample, is the Navy going to consider using some of the data that is picked up by BWS for part of your RI? That should help define the plume or where it's spreading? Because you're only looking at within your boundaries, but I think that having that data from BWS would add to your data and quality and paint a better picture.

A4: (Ms. Tamashiro) That is an excellent recommendation, and I'd like to say that the Navy is planning to do a PFAS background study, and will be asking other agencies for PFAS information they may have collected. We are looking at gathering data from all across Oahu to try to do a PFAS background study, and that would include BWS data if they are willing to help with this study.

C1: (Mr. Curtis) In light of that, BWS has asked to join the RAB, so that would bring their expertise to the RAB.

C2: (Mr. Lau) Thank you for that point. I want to add to it, the November 2022 event occurred and in January [BWS] sent a letter to the Secretary of Defense asking that all monitoring wells at Red Hill –

not only those drilled for this effort, but drilled for the investigation remediation action – that all monitoring wells immediately begin ongoing testing, at least monthly for PFAS chemicals, because I think the problem is beyond the parcel of Red Hill itself. It's moved with the groundwater beyond it. But it's important to collect this data to better understand what the impact is, because it's outside the base now. That's my strong recommendation. I understand that the EPA and DOH have made that request too, and I hope Karnig Ohannessian will agree and begin immediate testing on a regular basis. This is now a year and a half after our initial request.

C3: (Ms. Tamashiro) The RI will focus on characterizing the nature and extent, horizontal as well as vertical extent, of PFAS that originates on the Navy property. If we find that it goes beyond the Navy property, then we will sample.

C4: (Mr. Lau) We have the data.

C5: (Ms. Tamashiro) We have data from our baseline sample, which is the Navy property wells, and we have a year's worth of data – is that what you're referring to?

C6: (Ms. Kawasaki) Let's revisit that at the end.

Q5: (Mr. Kajihiro) You mentioned that there's no exceedances of the regional screening levels. There's some substances where there's no levels determined and I know the EPA is coming out with new levels all the time, which you will have to be responsive to. Can someone explain what the different screening levels are that we're looking at? Regional Screening Level, Environmental Action Level, what other things do we need to consider and how they compare to each other? And the other question about sampling – are you looking at streams and waterways and tissue samples from marine biota where we know that PFAS bioaccumulates?

A5: (Ms. Tamashiro) The first part of that question was about the screening levels that we use and the bottom line is that the Navy follows the DoD [Department of Defense] policy which applies to all DoD facilities across the nation where we follow the EPA's regional screening levels. We are not allowed to deviate from the EPA's RSLs, it's a DoD policy. At the time when we collected the sample, for groundwater at least, we use whatever screening level is put out by EPA at that time. That's why as our investigation progresses, we're going to use the EPA screening level that is current right now, which has different numbers than what it was previously.

Q6: (Mr. Kajihiro) So if it changes, you're going to have to go back and redo some numbers?

A6: (Ms. Tamashiro) As we collect more data and do further investigations, yes, we will update the RSLs that are used. They're always going to be based on the EPA's screening levels.

Q7: (Mr. Kajihiro) So my other question, about streams and waterways, fish and tissue samples.

A7: (Ms. Tamashiro) We're starting with the source area. We know that there was a release at Adit 6 so we're starting our sampling around that area. If it shows the PFAS is extending beyond the boundary of the Navy's property, then we will look into Halawa Stream, and if we find it in Halawa stream then we'll step out and do biota, but we have to always start at the source. If we start at the end point, say Pearl Harbor, how do we know if it's coming from the Navy or from somewhere else? I also want to point out that even though I just said that, we are planning on doing some sampling within Pearl Harbor of the sediment, but it's related to the nearby PFAS sources closest to the harbor. So at least if there's contamination in the sediment then we can tie it back to a location on the land that would be nearby. We're not looking at Pearl Harbor under this Red Hill Investigation, yet. We're looking at Pearl Harbor under another project.

VI. STATUS OF OTHER CLEANUP EFFORTS

Ms. Tamashiro presented that there is a status update table of all projects the Navy is currently working on. She asks that if there is interest in any of the other projects, attendees can write on the index cards on the tables so that the Navy knows what to focus on for future RAB meetings.

VII. QUESTIONS AND ANSWERS

Q1: (Mr. Lau) Right now, it seems like your focus and search is on AFFF, past use of AFFF. But are PFAS chemicals used by the military only in AFFF? Or are there other potential sources of PFAS generated and disposed of at DoD facilities?

A1: (Ms. Tamashiro) The primary source of PFAS that was used by the military is in AFFF. We do have plating facilities that had fire suppression systems that held AFFF . Again, we see it in the media that PFAS is pretty much found everywhere. It's in common household items, in everyday items that we use and so to say that PFAS that's found in the environment is all coming from the Navy or the military – that has to be proven. We're trying, by looking at what the Navy knows has been used and what the Navy could've potentially put into the environment and where it might have happened.

Q2: (Mr. Lau) I'm glad you're doing work on OWDF, maybe that site can be reopened and revisited because of PFAS contamination in disposal waste products from Red Hill?

A2: (Ms. Tamashiro) For information, the DOH has sent the Navy a letter telling us to reopen the site. It was previously closed, and the Navy has agreed to reopen this site, but it's based on petroleum exceedances found in the wells around the OWDF. With that said, under this RI we are going to be looking at PFAS in some of the OWDF wells, but the OWDF site itself is being reopened because of the petroleum.

Q3: (Tara) How crazy is this? That we have to prove that the Navy did it, we know of the spill, we know the effects of their presence here and what has come of it? This is performatory, it's just to help mitigate the damage that they've done. Can you imagine what you said, that it will take 2 years for the results, but in the meantime what has been done? What has happened for the affected families and communities? Nothing has ever been done, what consequences have come of the Navy? Have they had to pay a fine, has there been retribution, have they even said sorry to the community? How can it be treated as so normal to even have PFAS in the water? Responsibility and retribution need to be done in the meantime while this study happens. The results – how easy would it be to give this information to the community?

A3: (Ms. Tamashiro) As soon as we receive any validated results from the laboratory, we are planning on sharing those results at the next RAB meeting so that the public can be informed with the most recent information. We're not waiting until the Draft RI Report is available.

Q4: (Ms. Gorman-Chang) On Slide 11, you said the soil samples will be taken down to the bedrock?

A4: (Ms. Tamashiro) Yes, that's correct.

Q5: (Ms. Gorman-Chang) I don't understand why you repaved over the site at Red Hill; isn't that going to prevent further testing? And did the EPA approve this?

A5: (Ms. Tamashiro) The regulatory agencies were on site when the excavation happened, and I believe they did approve of the filling of the excavation with clean material as well as the paving. The paving was done because it was still an active facility at the time and to access the Site, it had to be paved. Paving also provides a cap over any material that might be left in soil, so that can prevent any further migration.

Q6: (Ms. Pcola-Davis) On Slide 8 of your presentation, called "Spill Response Action Baseline Groundwater Sampling", you said that the fingerprinting of PFAS detected in the five wells with exceedances did not match the AFFF spilled in November 2022. What did the fingerprint match then? Is it something in the past? Or do you not know?

A6: (Ms. Tamashiro) We don't know what the fingerprint matches. That's why we're going to be going to that particular location in Area B and doing some additional drilling and testing of the soil and groundwater.

Q7: (Ms. Pcola-Davis) On the Safe Waters site, I know you said the data is there. Is the data for the five wells with exceedances in the same dataset?

C1: (CAPT Sullivan) For those that are not familiar with the Safe Waters website, there are two sections I want to make sure we're making a distinction between. There's the groundwater site, the remediation site that covers all the remediation that could be groundwater, and then there's the drinking water side of the house. You will not find these on the drinking water side of the house, you would find them on the remediation side of that website.

Q8: (Ms. Pcola-Davis) Is it on the interactive map?

A8: (CAPT Sullivan) Yes, it is in the interactive map.

C2: (Ms. Townsend) On Slide 7 you made a point that the spill response started within 2 hours. I wanted to highlight that I feel like that statement is maybe an attempt to assuage people's concerns, but that's misleading. Also at that time it was pouring rain, the cameras were not working so they don't know exactly when the spill began. Someone came upon the barrel that should've been full of AFFF concentrate – not the regular foam they use when they practice, but the concentrated form of this. So to say that the response began within 2 hours of the spill is misleading. It was within 2 hours of the spill being detected by humans, but we don't really know how long it had been leaking before anybody noticed. In addition to that, it was actively pouring down rain at the time. I'd also like to compliment that this is a highly controlled meeting; very well done, very locked down with the timer going off, I really feel like it doesn't encourage people to speak up and share their feelings. This is a highly controlled meeting and everything is focused up there. Even the handout is impossible to read, and I know my eyes aren't great but I have regular eyes. Make it more accessible to people so we can actually grapple with this information. Print it bigger, we don't need the area to write on the side of the slides. You could science fair these slides so we can take time to really read it. You're flipping through slides very quickly so we can't read it. You're really locking down information.

C3: (Ms. Tamashiro) We will see what we can do about improving our next meeting. I would like to say that everybody is welcome to provide their feedback to us about how we can improve the meeting or if you have any ideas for what topics you'd like to focus on in the next RAB meetings. Please use the index cards on your tables and give us the feedback that we're requesting.

C4: (Mr. Curtis) And to reinforce that, the selection of what we discuss at the next meeting will be a discussion among RAB members and the military with input from everybody else. But it's the RAB members and the military that decide what the agenda is. Send your comments to the military or send them to me – henry.lifeoftheland@gmail.com

C5: (Ms. Sutton) This is not a question, so much as a statement. My name is Tara Sutton, I wanted to introduce myself. I was the director of community engagement with the University of Hawaii. I wanted to let everybody know that there is a health registry that has been started through the university for the Red Hill fuel spill and if there are questions or comments about that then please see me after. And if there's a way I can help make a better presentation at the next meeting, I would like to be considered.

C6: (Mr. Curtis) While some people may be frustrated with meeting, this meeting is the start of quarterly meetings where we can really grasp what's going on with the military. If we really want to deal with PFAS, every Teflon pot made before 10 years ago is made out of PFAS. Raincoats are made out of PFAS. PFAS are in all our homes and in all our bodies. So I actually commend the military for taking the leadership in this. Kyle [Kajihiro] is the one that actually suggested that the RAB take on PFAS and it was not at all clear that the military would agree, but the military did and this is, as far as I know, the most comprehensive discussion in the public on PFAS so I hope this is the start of something.

C7: (CAPT Sohaney) I appreciate the feedback on anything we can do to improve the information flow, whether it's here in presentation or prior to – once the committee decides exactly what we want to talk about in our next meeting in September. I've also made a movement to bring in some other forums as a community to make sure we're synchronized so we're getting the most information out. Whether that's here in this forum or Navy Closure Task Force, for example, so it's much bigger than this particular forum but it's my job to make sure that we're including the community to the maximum extent possible. I appreciate the feedback and please continue to give us that and we'll improve this as we move forward. Thank you.

Q9: (Mr. Kajihiro) In the past, the regulators – Department of Health and EPA – used to sit in the meetings and be able to engage in conversations and I just wanted to know why you're sitting back there, it'd be great to have you in here also asking questions and helping to answer some of the questions about the standards being used for screening and so forth, why standards have changed over time, especially with EALs for human health. Maybe consider you could reply to this circle and engage in conversation.

A9: (Ms. Brockway) Thank you so much for that invitation. I don't want to crash your party. Back in 1999 through 2008 or 2009 I was a member of the RAB with you and Henry until I moved away from Hickam Air Force Base where I lived during that time. I didn't feel like it was my kuleana to sit there with those of you who are RAB members at this time. So thank you for that invitation, I appreciate it.

Ms. Kawasaki thanked attendees for coming, invited attendees to view posters, and adjourned the meeting at 7:56 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 Systems Command, Pacific *258 Makalapa Drive, Suite 100* *JBPHH HI 96860* *Tel. (808) 472-1428*	*University of Hawaii at Manoa* *Hamilton Library Hawaiian and Pacific Collection* *2550 McCarthy Mall* *Honolulu, HI 96822* *Tel. (808) 956-8264*	*Pearl City Public Library* *1138 Waimano Home Road* *Pearl City, HI 96782* *Tel. (808) 453-6566*

ATTACHMENT A

LIST OF ATTENDEES

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

ALIAMANU MIDDLE SCHOOL, HONOLULU, HAWAII

June 26, 2024

1. Stephanie Kawasaki
2. Sara Coffey
3. Carrie Plath
4. Hanna Zheng
5. Rob Sadorra
6. Steve Saepoff
7. Steve Hurff
8. Dayna Fujimoto
9. Jeff Hart
10. Grace Simmons
11. Corwin Colbert
12. Lynn Brockway
13. Susan Gorman-Chang
14. Wendell Wen
15. Teresa Quiniola
16. Steve Sahetapy-Engel
17. Erwin Kawata
18. Kawaikapu Hewett
19. Nui Ka'ahanui
20. Watson Tanji
21. Amber Mori
22. Eli Martin
23. Belinda Turran
24. CAPT Mark Sohaney
25. Monica Gramling
26. Kat Brady
27. Mike Dau
28. Larry Veray
29. Francie L. Whitfield
30. Kyle Kajihiro
31. Ed Drierak
32. CAPT James Sullivan
33. CAPT S. White
34. Henry Curtis
35. Victor Flint
36. Kori Tanaka
37. Chuck Anthony
38. Ernie Lau
39. Jeff Johnson
40. Helene Takemoto
41. Matt Cohen
42. Jan Kotoshirodo
43. Justin Lam
44. Rachel Gilhooly
45. Janice Fukumoto
46. Melissa Forrest
47. Ron Shimabuku
48. Robert Huber
49. Erinn McKell
50. Andrew Hunt
51. Joyce Lin
52. Rosalie Luo
53. Theodore Uekawa
54. Mona Ching
55. Samantha Tomisato
56. Ben Dunn
57. Janice Tomashiira
58. Chandra Kanemaru
59. Meagan Ostrem
60. Susan Pcola-Davis
61. Linda Ichiyama
62. Tara Sutton
63. Vina
64. Juanita
65. Tara
66. Lauren Baba
67. Tamara Probart
68. Wayne Tanaka
69. Allison Hutto
70. Tom Myers
71. Malia Zinn
72. Jocelyn Tamashiro
73. Cowan Azuma
74. Marti Townsend