Hello, everyone, and welcome to the Daily Water Update for February the 25th. I'm Captain Darren Guenther, Chief of Staff for Navy Region Hawaii.

For the first Friday in many weeks, we finally have several neighborhoods with water certified by the Hawaii Department of Health as safe for all uses. For the families at Pearl City Peninsula, who are just now returning to using your water, I want to emphasize that we still have resources available to you, you can find those resources on our water resources webpage, that's navy.mil/jointbasewater. And you can also find some of those on our Facebook site.

Over the past few months, lots of sampling and testing has occurred. In fact, we've done over 1350 tests and sent those to the mainland, EPA and DOH certified labs. The sampling and testing guidelines were designed and developed in concert with the experts at the Hawaii Department of Health and Environmental Protection Agency as members of the Interagency Drinking Water Team. Today we're going to talk about how they chose the houses they did and how many houses they chose. You've had questions on some of this, and so hopefully, we'll try to answer them. We'll also talk about how to ensure you don't have issues with standing or stagnant water. When you return to your homes in case you haven't run the taps recently. We'll also talk about what those issues from standing or stagnant water might look like. To address those topics. We're going to bring back, Mr. Chris Waldren. He's an environmental engineer, as well as a member of the Interagency Drinking Water Team. But before we bring Chris on, let's go to the map and talk about updates.

So Red Hill move-in is complete. We completed that this week. And we have all our families back there. Again, any continuing issues that you have in that Red Hill neighborhood, please call the Task Force Ohana number, and they are standing by to help. The Pearl City Peninsula neighborhood move-in is underway. So we are on day two of our four steps to drinking water handout that if you're a resident of that neighborhood, you were provided. So we're on day two of TLA. So this is the last full day of TLA. If you're in a hotel, that hotel benefit will continue tonight. And you'll have to
check out of that hotel tomorrow morning. But move-in well underway for Pearl City Peninsula. And that's of course, after the Department of Health lifted their advisory and declared that neighborhood at Pearl City Peninsula, the water safe for all uses.

00:03:22 - 00:04:08
CAPT. GUENTHER
Now three neighborhoods, their packages within two zones are at the Department of Health. That's after the Interagency Drinking Water Team made their recommendation to clear those areas and amend that advisory. Department of Health was provided those packages for Ford Island, Hale Moku and Hokulani, yesterday, It'll take them about seven days to go through those packages deliberately and make their decision on that. So that's good news as well. The rest of our map shows striped yellow or hashed yellow indicating that all test results are back on-island from the mainland labs. And those packages for those neighborhoods are either in review or awaiting review. Now the packages that are closest to the finish line for that Interagency Drinking Water Team review and packaging and remember, it's not just a review that the Interagency Drinking Water Team is going to do, it's a full packaging that they're going to put together to present to the Department of Health and the neighborhoods that are closest I'll give you the next four McGrew points, Halawa, Camp Smith, and Earhart, those are the next neighborhoods closest to being ready under that review. Okay, and that's our update map update for today.

00:04:09 - 00:05:33
*break in transmission*

00:05:34 - 00:06:32
CAPT. GUENTHER
starts with the sampling results and to analyze those sample results in move towards through that process to certify the water. So some residents already returned home in that Red Hill neighborhood and a lot of residents are doing the same in Pearl City Peninsula today. So we'll talk about with Chris, some of the questions that you've had on how homes for sampling were selected. But also, we wanted to talk about stagnant water. So for those of you that may have not been in your homes, or certainly if you've been but not utilizing the water per the advisory, which we recommended, a stagnant water can create some of its issues, some of its own issues, and we want to address those today. So Chris Waldren is here, he's an environmental engineer. He's been with us quite a bit. Right now he's gonna beam into us remotely. But Chris, welcome back. Thank you for being here.

00:06:33 - 00:06:42
CHRIS WALDREN
Hey, it's great to be with you. I'm sorry, I'm not in the room with you today as kind of as we typically have been, but I'm in my office today, but it's, uh, it's great to great to be with you today.

00:06:43 - 00:07:13
CAPT. GUENTHER
Well, thank you. A number of questions from our community have come up and I think I want to pose them to you, as a member of the Interagency Drinking Water Team, and probably best poised to answer them. How did that team, the Interagency Drinking Water Team, which is made up of the Hawaii Department of Health and the Environmental Protection Agency, how did you come up with sort of the homes and the number of homes you chose to conduct testing on?

00:07:14 - 00:08:03
CHRIS WALDREN
Yeah, I mean, that that is a it's a really good question. And what we did was we work together. So again, as you mentioned, it is an Interagency Team, all the work that we do we do collaboratively. And so in the, in the case of selecting homes, we use a science based approach, we didn't have a predetermined number or figure or anything like that, let the science lead us to ultimately developing a sampling plan that identified the number of homes. And the things that we looked at and that were multi, what we call multiple lines of evidence or multi factor, so it wasn't a single thing. We looked at the the nature of the contamination, where it originated at Red Hill, the type of contaminants out was in the water distribution system.

00:08:04 - 00:08:25
CHRIS WALDREN
We looked at complaint maps, where, after Thanksgiving when the release occurred, there were complaints that had been phoned-in both to the Navy and also to the Department of Health independently, we looked at those to develop what we called kind of heat maps, but those were areas where complaints had originated.

00:08:26 - 00:08:45
CHRIS WALDREN
We use sampling data that we had collected within the distribution system. We used all of that type of information, in addition to doing some analysis via statistics and other methods to come up with a comprehensive health protective approach to identifying samples and sample locations.

00:08:46 - 00:09:42
CHRIS WALDREN
We also looked at geography. So you're looking at when we divided up the Joint Base, Pearl Harbor-Hickam drinking water system network into the separate zones, as you were mentioning, previously, up on the map, we looked at the geographic coverage within the area, because we are looking at throughout the distribution system and throughout the network, we want to make sure that we had coverage throughout those areas, including things that might be dead ends. When we call that within a drinking water system where the water comes and kind of stops and might stagnate or collect in the pipes, we looked at those things as well. So it really was an effort to look across all of the information and data that we had available to us to come up with and develop health protective sampling plan that would allow us to be able to confidently, you know, make a recommendation of Department Health that the water is safe, and that health advisory should be amended

00:09:43 - 00:10:04
CAPT. GUENTHER
Chris there has been a lot of questions on the number of 10% that's thrown out there and I know that you know the sampling will go on after that with further sampling after the initial samples come back, but can you talk about how 10% testing, can you give residents some confidence that that's the right number?

00:10:05 - 00:10:52
CHRIS WALDREN
Yeah, I mean, and that's another situation where I think you have to look at the entire picture in order to really kind of evaluate or assess that factor. And for most zones, most neighborhoods, we're going to sample upwards of 65% of the homes within that neighborhood. We'll have sampled every school, every CDC. We also are sampling 10% of other buildings or structures. And then, in addition to that, that, as you mentioned, we have a essentially two year monitoring period, where we follow up for the first three months after our initial sampling with 5% 5% 5%. And then we go on after that for up to two years. And so that's how we get at the 65% number.

00:10:53 - 00:11:30
CHRIS WALDREN
The initial 10% is to provide indication of the overall water quality within a zone. Because the contamination was released from Red Hill shaft and entered the distribution system, and the distribution provides water throughout the zone, that provides us with the data to be able to evaluate residences on a zone by zone basis. And so we don't have to sample necessarily every single residence within a zone in order to make a declaration as to or determinations, better way of saying it, to this, you know, the safety of the water.

00:11:31 - 00:12:15
CHRIS WALDREN
The other part of that I would also just like to touch on is that as part of the initial sampling, we are evaluating what we call stagnation samples. So we are collecting samples 24 hours after the initial flushing and then 72 hours after that, and working with EPA and Department of Health to be able to evaluate whether or not there might be some premise plumbing type issues or other concerns associated with the contamination. So I would end with is that it's a rigorous response, data driven, and we're using that to be able to look at multiple lines of evidence and layers of information in order to make health protective decisions.

CAPT. GUENTHER
Okay, Chris, next question then given you know, that initial percentage of homes that are tested, I want to ask about exceedances. It's come up in a few zones, that there may have been several exceedances in the the 10% of homes that were sampled. And the question that I would have is why is it that only those homes are flushed, and not more.

CHRIS WALDREN
So we haven't had I wouldn't clarify, I guess classified as several or a significant number of exceedances. In most of those, we've had maybe one or two if we've had any exceedances at all. However, with that each exceedance is rigorously evaluated by the IDWST, and we dig into the data for that zone at any exceedances in that zone. And there's no predetermined path forward and a sense of saying that we would only evaluate or only sample that particular home that had the exceedance. In fact, we have during our investigation and works recommended that homes that hadn't necessarily been sampled next door, across the street or slightly further away have been sampled or resample based on the effort.

CHRIS WALDREN
So we look at each one of the exceedances individually. And we're looking at it to try to again taking a step back to look at the the actual map of the data to determine whether or not it appears to be something localized, which we would call a premise plumbing issue. And we do that by looking across the geographic area and all of the data within that zone. We also have distribution samples, where we've collected samples from the fire hydrants out along the distribution network that come into play. And so each one of those is evaluated independently.
So we determine whether or not a single home should be flushed or kind of like a local area, if you will, or a small area, which would be the homes next to it. And ultimately, if the data were to indicate it, we could potentially flush an entire zone. We haven't seen that. But it's certainly built with into the sampling plan. So there were no decisions made ahead of time, meaning in the plan phase so that we could only do sampling at the home that had the exceedance where we are looking and ultimately the data determines how far we go in terms of the resampling and flushing efforts that happen.

Okay, I'd like to move to a question that some of our residents might be interested in helpful as they move back into their homes and start reutilizing their water, we put out this graphic called run the taps. And I just wanted to hit on that. Do residents need to run the water when they return to their homes or when they return to utilizing that water if they'd stay in their homes? And why?

Yeah, I mean, so the short answer is yes. I think it's, I would recommend that that's the best idea. Then you know, water within a drinking water system is intended to move. And, you know, every drinking water system throughout the world really is set up so that the water moves throughout the the network, if water sits stagnant, it's not being used in parts of the network, then you can get that, we typically use chlorine or chlorine related agent to disinfect water systems, and that chlorine will decline over time. And so sometimes you can get some odors that are associated with bacteria in water that has set stagnant. You can also get sheen and water that has said stagnant.

So the best course of action is to when you you know, return home. And we recommended that is to run the tap, just like you said on the figure with the figure. And I'm sure that you've said many times on you know, the daily water updates, it's a really good idea when you return to your residence, run the tap, run out for 15 minutes, hot, cold, let it run, get that water moving again. And that'll replace the water in your house with water that's coming, you know from the distribution system. And it's just a smart, effective and good way to get clean, good, clean water recirculating through your system. Even though we have flushed all the homes and all the businesses, it may have
been a few weeks, it could have been a couple of weeks since you know the water in your home is actually turned over. So it's surely a good idea to do that.

00:17:08 - 00:17:43
CAPT. GUENTHER
Yeah, I know some neighborhoods that are coming up for decisions by the Department of Health may have been a month or more that since that Navy flushing team came through. And of course, the Navy flushing team, they're I think objective, it's safe to say was to flush any contaminated water from the incident through. But we're talking I think, Chris about stagnant water. And so what are some of the some of the issues, water quality issues that someone might see from stagnant water?

00:17:44 - 00:18:46
CHRIS WALDREN
And you're right, so you're exactly right. So the flushing team was there, did a thorough and rigorous flush for usually a couple hours per house to turn all the water over, including the water in the water heaters, and so on and so forth. But if that water has sat, since then for, you know, upwards of a month, weeks or a month, the type of things that you might see as you might have some odor in the water. It could have a kind of a more of a rotten egg type smell to it, which is indicative of bacteria. You might have sheen on the water. And again, it's got to be really clear about that, I mean, you should not have oily sheen, and you should not have petroleum in your water. However, there are natural conditions, bacteria and minerals that can actually create a sheen on the water that you might observe as well. And so that's where we recommend as the best course of action is to run those taps in order to turn that water over after you've returned home. Because it might have sat stagnant for a little while.

00:18:47 - 00:19:19
CHRIS WALDREN
I mean, ultimately, I do think it's really important to emphasize that if you have if you see sheen on the water, you smell if it you think it smells like petroleum, call the emergency operations center, we have a rapid response team that will go out and work through the observations and help with making a determination about you know what it is that's out there, if it's petroleum rated or not, that shouldn't be there. And, you know, we're here to help you make the determination as to you know, what the best course of action is at that particular residence.

00:19:20 - 00:19:48
CAPT. GUENTHER
Okay. But Chris, if in obviously, we want to be clear with our residents that if there are any issues that you see or concerns we want you to call the emergency operations center so that we can talk you through this and then send a rapid response team which we have standing by. But I think I heard from you that a sheen with stagnant water may not be fuel or petroleum at all. Is that correct?

00:19:49 - 00:20:54  
CHRIS WALDREN  
Yeah, that is correct. I mean, it could be associated with bacteria or minerals or some other issues that is not necessarily petroleum related. But as you said, it's really important to note that the Emergency Operations Center and the rapid response team are there to help and to help with making an assessment as to you know, what might be the cause. And we certainly I would say is just a quick footnote or side note, is we certainly expect that there will be water quality reports, most of those will likely be associated with stagnant water. But we take all of that very seriously. I think it's part of restoring public confidence in the water quality. And that's one of the reasons why we have a long term monitoring program set up as part of the IDWST sampling plan, as well as that the rapid response team is set up. So all those things are leading to trying to restore public confidence in water quality, and making sure that concerns are addressed and addressed in a timely manner.

00:20:55 - 00:21:14  
CAPT. GUENTHER  
Chris, you got one final question, I want to go back to sort of water quality that the residents might notice. I understand that there's also the possibility from not having used the taps recently, that residents might see cloudiness in the water is that just possibly sediment?

00:21:15 - 00:22:13  
CHRIS WALDREN  
It could be certainly, it could be sediment, it could be minerals in the system. It could be a variety of different things. But those would be the most common things that would be associated with that. And again, as you we've talked about running the taps, generally, we'll address that and address it pretty quickly. But yeah, that's one of the things that might pop up and due to the water not moving through the distribution system as it normally does. The other thing I would note I would make is that we flushed the systems and in flushing the systems, sometimes that will, you know, release additional minerals that have accumulated within the system that might cause some of the cloudiness that you're seeing. So it's all part of this process. But it's important, again, that you know that we work together in terms of flushing, with the residents and also be responsive to concerns that they might have.
00:22:14 - 00:22:52
CAPT. GUENTHER
Okay, and so I'm picking up this graphic that we sent to our residents, your run the taps, that's definitely something that we're asking for all our residents to do when they get back to utilizing that water to try to avoid some of these issues. But again, we have our rapid response team standing by for you. If you have any questions and concerns, please give the EOC Emergency Operations Center a call, so that we can dispatch folks out to help you, Chris, thank you for thank you for serving our community and your role. I really appreciate it and thanks for your expertise today.

00:22:53 - 00:22:59
CHRIS WALDREN
Thank you I really appreciate being here and wish everybody a great Aloha Friday. Thank you.

00:23:00 - 00:24:02
CAPT. GUENTHER
Thanks Chris. And that for the rest of you out there was your daily water update for today. Please join us Tuesday, same time. We won't be here Monday, but please join us Tuesday, same time. We're monitoring your questions on Facebook and you can also email your questions to see CNRHPAO@gmail.com. Please check out our water info resources website that's at navy.mil/jointbasewater and check out the latest water data at JBPHH-safewaters.org. And don't forget to check out the good stuff at greatlifehawaii.com/slashwegotyou. Please remember we're all in this together as one community and ohana. Stay safe. Take care of yourself. Take care of each other and we'll see you next time.