

00:00:07 - 00:00:42 CAPT. DARREN GUENTHER

Hello, everyone, and welcome to the daily water update for March the ninth, I'm Captain Darren Guenther, chief of staff for Navy Region, Hawaii. We've been seeing lots of progress on our water, in many areas of our map are turning shades of green, showing the momentum to restore that water. Our thanks to our interagency partners, the Hawaii Department of Health, as well as the Environmental Protection Agency for their efforts on behalf of our community in restoring that water in your neighborhood.

00:00:43 - 00:01:17

CAPT. DARREN GUENTHER

We're still committed to keeping you informed on the things that interest you. One of those is the sampling and testing of the water. That's already taken place as a part of our plan and that is yet to come as a part of the long term monitoring. The sampling and testing guidelines were designed by subject matter experts at the Hawaii Department of Health and Environmental Protection Agency alongside Army and Navy experts as a part of the Interagency Drinking Water Team.

00:01:18 - 00:01:53

CAPT. DARREN GUENTHER

So today, we'll bring back Chris Waldron. He's a professional environmental engineer for the Navy and Marine Corps Public Health Center, and he's also a member of the Interagency Drinking Water Team. He's going to explain some of that water sampling and testing that's already happened as a part of the initial recovery plan, but also some of the steps moving forward for that long term plan and monitoring. But first, let's go ahead and take a look at our map for the updates there.

00:01:54 - 00:02:31

CAPT. DARREN GUENTHER

So this chart is posted on our websites. You can find it on our water resource website, it's one link away one click away in the upper right hand corner of that website. It's also available on our data website separately. So the first thing I'd like to do is go in to our completed move-ins. So we are complete for move-ins for Pearl City Peninsula, for Halawa Housing, McGrew point, Ford Island, Camp Smith, Hale Moku, Hokulani, as well as Red Hill neighborhood.

00:02:32 - 00:03:19

CAPT. DARREN GUENTHER

So just late yesterday, zone E1, which comprises the neighborhood of Makalapa, was certified by the Hawaii Department of Health as their water safe for all uses. So yesterday the notice went out. So today is day one for the TLA sort of drawdown. So day one today, day two tomorrow, Thursday, which will be the last day of TLA. If



residents are in a hotel or some sort of lodging in Makalapa that means that they'll need to check out on Friday morning, which is day three. So that's Makalapa there are a couple additional zones which have also been cleared.

00:03:20 - 00:03:59

CAPT. DARREN GUENTHER

First I want to highlight zone D4 it's what I call Hickam beach, also declared water safe for all uses yesterday by the Hawaii Department of Health. And there are no homes in that area but there are a lot of our facilities there. And one more zone that has been cleared and that's a portion of Aliamanu neighborhood. As we've been talking about over the last couple of days, the Army Garrison Hawaii is going to wait for all three zones for Aliamanu to be complete, prior to executing a move-in.

00:04:00 - 00:04:31

CAPT. DARREN GUENTHER

So with that, we have a number of other zones that have their full data packages, endorsed by the Interagency Drinking Water Team and currently at the Hawaii Department of Health for their analysis, review and decision. The first of those packages are the other two zones and Aliamanu. So we call it H2 and H3. Those are there at Hawaii Department of Health and we're waiting on their work and their analysis and decision on that.

00:04:32 - 00:05:15

CAPT. DARREN GUENTHER

Now we have a number of other packages covering a lot of neighborhoods at the Hawaii Department of Health and a new one that I want to point out that went over just yesterday late yesterday is zone F2 is currently at the Hawaii Department of Health for their analysis, review and decision and that includes the neighborhoods of Catlin Park, Maloelap, Doris Miller, Halsey Terrace, and Radford Terrace. A lot of our residents are going to be within that zone. So we're happy to see that that has gone over to the Hawaii Department of Health. Again, it will take them approximately seven days to take a look and make their decision for zone F2.

00:05:16 - 00:05:48

CAPT. DARREN GUENTHER

Other zones that are also with the Department of Health F1, which is the NEX and Moanalu Terrace neighborhoods in D2, which is that Hickam area that includes Onizuka Housing, Hale Nicola, as well as Officer Field. And finally A3, we call it Iroquois Point, sometimes it includes Kapilina beach homes is also at the Hawaii Department of Health, for their independent review, analysis and decision.

00:05:49 - 00:06:21



CAPT. DARREN GUENTHER

So that leaves only four zones left on our map that are still at the Interagency Drinking Water Team. That team is doing their analysis, building those products to form their recommendations, which will then as a follow on be forwarded to the Hawaii Department of Health for their independent review and decision. And one of those is the Earhart area. I understand that there are a lot of homes and a lot of our residents are in that. So that is on their scope and they are looking at those things.

00:06:22 - 00:07:32

CAPT. DARREN GUENTHER

Now, I want to move into one more piece here later today, we're going to update and post a new map and what you're going to see is something that you may not have seen before, and that's estimated resident returns in the very right hand column for all zones that have homes. Now, those dates were picked making assumptions that the Interagency Drinking Water Team would take a certain amount of time, and the Hawaii Department of Health would have the time available to do their analysis, review and decision. So those dates are based on that. And given if there are no concerns or issues along those timetables, we should meet those timelines. However, they are estimated, so if there are any delays, timetables will move to the right. But this is the first time I think we've seen dates in all of those blocks. So take a look at those. So with that, that's your map update for today.

00:07:33 - 00:08:25

CHRIS WALDRON

Okay, what I'd like to do now is bring in our guest. The Interagency Drinking Water Team plays a key role on certifying in restoring the water in that process. And so what I'd like to do is bring Mr. Chris Waldron in, come on in Chris, to talk about some of the resident return and return to water use. And we've had Chris on before, and you're an environmental engineer, you're a member of that Interagency Drinking Water Team and so you know, the process, you understand the details of what that team is looking for and so we wanted to bring you on to ask you some questions that we continue to see from our residents, on the water and on those processes as well. So welcome back, thank you for being here.

00:08:26 - 00:08:28 CHRIS WALDRON Good to be here. Good to be here again today, in person.

00:08:29 - 00:08:31 CAPT. DARREN GUENTHER Yes, I think last time we had you on virtually.



00:08:31 - 00:08:33 CHRIS WALDRON Yeah, I was remote. So it's always better to be in person.

00:08:34 - 00:08:51 CAPT. DARREN GUENTHER

Thank you for being here. So the first question I have is on the testing and the numbers of the homes that were selected? How did the Interagency Drinking Water Team come up with those specific homes and the numbers of homes that were chosen?

00:08:52 - 00:09:28

CHRIS WALDRON

Yeah. That's always a it's always one of the questions that we get, and we get most often. That is, you know, how did you come up with the numbers of homes that you're testing and where are they located? Really we start at the beginning, you know, we start at the, you know, where the source of the problem where the release occurred, and what was released, because that helps inform us in terms of what the strategy is about it. So in this case, since we had a release from the well, and it went into the distribution system, we have a really well defined source. So we know where it came from, we know what was in the source and what their characteristics of the source are.

00:09:29 - 00:09:59

CHRIS WALDRON

So we used that information first by putting together the map that you have behind you in terms of separating into distribution zones. That's used with other information such as the nature of the contaminant. So in this case, it was total petroleum hydrocarbons, jet fuel, what its characteristics are. We use the number of houses total that we have that are served by the water distribution system, and then we looked at things like the space distribution.

00:10:00 - 00:10:44

CHRIS WALDRON

So you're looking at the area. So the area that was potentially impacted, those type of factors go into this kind of whole decision making process. I call it kind of the belt and suspenders and parachute approach, because you're, you're evaluating and testing your assumptions every step of the way. We also use statistics. So we use statistics, similar to failure analysis, where we look at where we might see exceedences of certain criteria, like a TPH criteria, all those things are rolled together. And so with that, we have a nested program that has all the checks and balances that are in it. So every time we have an assumption, we're checking that with data.

00:10:45 - 00:11:18



CHRIS WALDRON

Ultimately, I think that probably the key take home message is our focus is on protection of human health. We want to make sure that we are sampling homes so that we can assure the public and restore public confidence that their drinking water is safe. That does not require that every home be tested. But it does require that a significant number of homes are tested and also as we get those test results back, we have to evaluate the data to determine whether or not our assumptions are actually still valid every step of the way.

00:11:19 - 00:11:51

CHRIS WALDRON

That's one of the things that the Interagency Drinking Water Team has done and why it takes a little bit of time to work through this is that we are actually in the same room together, evaluating the data as it comes in to make sure that what our assumptions were in terms of the number of homes being sampled are still true and accurate, and whether or not we need to make adjustments. We have, you know, as you can see from the the map behind me the figure behind me, we've gone through most of the areas, we still have four left to go.

00:11:52 - 00:12:25

CHRIS WALDRON

But those assumptions have held true in terms of the evaluation and the results, and confident to say that the drinking water is safe. However, the last thing I would say on that kind of a long answer to your question is, we're not done. And I know that we'll talk a little bit later about LTM. But that's the first initial evaluation. And there's more to it to check on this as we go. Ultimately, to restore consumer confidence, we have to stay engaged, and continue to evaluate the data, which is what we're committed to.

00:12:26 - 00:12:44

CAPT. DARREN GUENTHER

Okay, Chris. So can you tell us about the 10% that was chosen by the Interagency Drinking Water Team and experts from from the interagency partners as well? How does that 10% equate to your confidence that, that we have this right?

00:12:45 - 00:13:17

CHRIS WALDRON

So with the 10%, again, with experts from the Environmental Protection Agency, from the Department of Health and Army and Navy, you know, we sat down together and discussed the number of homes that initially needed to be sampled. We looked at that from a statistical basis. Using failure analysis, as one of the approaches statistically came up with a 99% plus confidence limit with 10% of the homes initially that we can be confident that that drinking water is safe.



00:13:18 - 00:13:56 CHRIS WALDRON

However, that's rounded out by our spatial distribution within the neighborhoods where we are selecting homes throughout the distribution system. And I think we talked about before on dead ends, on loops, where the water might be a little bit more stagnant or sat a little bit longer. All of those were factored in to our decision making process. You've heard me say before that 10% was just the start in the end, and some zones we'll have sampled 100% of the homes because we have a minimum number that we do. We'l also be upwards of about 65% as we get through towards the end.

00:13:57 - 00:14:13

CAPT. DARREN GUENTHER

For homes that did identify an exceedance, can you talk about why it is that sometimes only those homes or a small number of homes in that area are flushed as opposed to a whole zone, if there's an exceedance found?

00:14:14 - 00:14:50

CHRIS WALDRON

Yeah. So what we do as part of the interagency team is when the data comes in, we evaluate the data, whether it's detected results, so if we had a positive hit and it could be a low concentration, or exceedances, where it's above an action level. So in the cases that you're mentioning, we've got a detected result that might be above an action level. We look at that first from a distribution wide perspective. And that is we're looking across the entire distribution system to see within that zone, whether or not this could be representative or an indicator that there could be an issue within the entire water.

00:14:51 - 00:15:37

CHRIS WALDRON

And the way that we do that as we look at we have distribution samples that are collected from hydrants and other places throughout the distribution system. We also look at the other homes in that zone to see whether or not we're seeing similar contaminant or the same contaminant in the water. The reason why we do that is we're trying to determine is this an isolated premise plumbing issue, meaning just isolated to that residence or that particular sub-area within a zone? Or is this potentially something that's broader? Certainly, if we're not seeing detections of a particular contaminant in any other home, or in the other places in the distribution system, that tends to focus our efforts into a more isolated individual home situation.

00:15:38 - 00:16:33 CHRIS WALDRON



So it's a rigorous process, lots of checks and balances. We've had lots of discussions about this within the interagency team. Again, our overarching goal is protection of human health and the environment, so we're being very deliberate in our processes. In almost every instance, every instance thus far, and I would say, likely, in all instances, we've seen have been premise plumbing issues, where we'll see one issue within a house. We will go to that location, we take every one of them very seriously, we look at the data around that location to make sure that we have a high degree of confidence that's only in that location. If not, we'll set will flush and sample the houses around it. In most cases, we've had enough samples and data around a location to be able to isolate it to a single residence, and even in some cases, a single faucet within a residence.

00:16:34 - 00:16:59

CAPT. DARREN GUENTHER

Okay, let me ask you a question, maybe shift the focus to our residents who were moving back in or starting to reuse the water in their homes and some of the sort of lessons learned that we've seen from that process. Do residents need to run their water when they get back in their home? Or restart restart using that water and why? Can you talk about that?

00:17:00 - 00:17:35

CHRIS WALDRON

So the quick answer is yes. I mean, I would recommend that for residents that are returning to their homes that they run their taps, you know, hot and cold for five to 10 minutes to get that water going. You could go a little bit longer. In some instances, we have I mean, the Navy has and Army has flushed every home within the the entire Joint Base Pearl Harbor Hickam drinking water network. However, in some cases, the sampling might have occurred a month before people have actually returned to their house so that water could have sat stagnant in their pipes in their house.

00:17:36 - 00:18:06

CHRIS WALDRON

Water and distribution systems are intended to move. So it's a good idea to flush your water when you were returned to your house, just so that you're getting the water moving again, within the the system. That'll give, you know, that'll give you better water quality and as initially as you get back because that water has probably sat there for a little while. Some things that you might observe, when you get back, there might be a slight odor in the water should not be a fuel odor, but you might have an odor that you detect.

00:18:07 - 00:18:32 CHRIS WALDRON



In some instances, we've had folks report that they've had noticed, not necessarily sheens but there's some discoloration or something in the water. Again, we have the Rapid Response Team that's set up to actually go out and respond to those to verify that it's not a petroleum related or other water quality related incident. I think we've had 70 plus responses from the Rapid Response Team.

00:18:33 - 00:18:58

CHRIS WALDRON

No TPH has been detected, you know, we have a testing kit that we take that gives us really low detection limits. So we have a high confidence in those results. So with that, I mean, it's just a lot of those are just practical kind of situations. If you have a, you know, a cabin or something you go to typically if you get up there, you would run the water in that because it sat stagnant for a while. It's kind of akin to that.

00:18:59 - 00:19:12

CAPT. DARREN GUENTHER

So the issues that our residents have seen for those that have had concerns are dealing with the stagnant water issue. Is that correct? Flushing your taps can eliminate that possibility. Is that right?

00:19:13 - 00:19:40

CHRIS WALDRON

Yeah, exactly. So that the issues that we've seen are associated more with just the water sitting stagnant in the pipes for a while from the time that we collected the samples to the time that we have people returning back to their home. So flushing that will help get fresh water from the distribution system in. You get chlorinated water back in that you want. That has sat stagnant, it tends to dissipate over time and we want that chlorine residual in the water. That helps prevent bacteria and other things.

00:19:41 - 00:19:49

CAPT. DARREN GUENTHER

Okay. I think you mentioned it, but if a resident comes back in their home and they do have any concern whatsoever with the water, call the Rapid Response Team.

00:19:50 - 00:20:04

CHRIS WALDRON

Yeah, absolutely. Absolutely. That's what they're there for. Again, as part of restoring public confidence we take every report seriously. Get a team out there quickly to take a look at it. We can collect a test if we think we needed to collect a test for TPD...

00:20:04 - 00:20:04 *break in transmission*



00:20:04 - 00:20:51 CHRIS WALDRON

...restoring consumer confidence in the system. We've done the initial sampling efforts to demonstrate that the water from the while the shaft that's now in the distribution system is safe, that the homes are safe. Now, what we're doing is we're moving into an extended, essentially two-year period, where we're going to continue to test homes within each of the zones over that period for a long list of contaminants just to make sure that that water continues to be safe, we don't expect that to really find anything in the water. However, it's really an important part of this is to make sure that we can continue to assure the public that what we have done as part of the initial response is safe.

00:20:52 - 00:21:33

CHRIS WALDRON

They'll be at least starting off initially, we'll be doing monthly sampling at about 5% of the homes and each one of the zones. That'll be based on when your zone went green, if you will, so it's not right away for the first three months. Then after that, we'll be sampling about 10% every six months. That allows us to look at what's going on with the water quality within the distribution system. It also allows us to look at other long term concerns that folks have brought about potentially leaching of petroleum, from pipes into the water system. We haven't seen any indication of that and we really don't expect that based on how long the petroleum was in the system with the initial release.

00:21:34 - 00:21:55

CHRIS WALDRON

However, as I said before, it's part of that comprehensive and integrated approach to making sure that we have data to support the decisions and recommendations that are being made. And it's not just based on a theory. We're actually, you know, in each step, we're testing, you know, what we think with actual data, and then that has to drive our decision making.

00:21:56 - 00:22:05

CAPT. DARREN GUENTHER

Okay, Chris. Well, thank you for your comments and thank you for your continued service to our community and helping us work towards restoring the water. It's out there.

00:22:06 - 00:22:31

CHRIS WALDRON

Yeah, I appreciate that. You know, our, our top priority is getting people into their homes with safe drinking water. Want to do that as quickly as possible. Obviously, that's taken a little bit longer, but that's because the team has really worked hard, EPA, DOH, Army,



Navy, to look at the data and make data driven decisions so that we can stand behind that every step of the way. So really appreciate the opportunity to serve. So thank you.

00:22:32 - 00:23:33

CAPT. DARREN GUENTHER

Okay, thanks, Chris, appreciate it. Okay, that was your daily water update for today. Commander Aleah McHenry is going to be providing the update tomorrow through Monday. So please join us tomorrow, same time. We are monitoring your questions on Facebook and you can email those questions CNRHPAO@gmail.com. Don't forget to check out our water info website that's at navy.mil/jointbasewater and check out the latest water data at JBPHH-safewaters.org. And make sure to check out the good stuff at greatlife.hawaii.com/wegotyou. 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 tomorrow.