

Capt. Guenther 0:10

Hello, everyone and welcome to the daily water update for March 15. I apologize for the technical difficulties we've been experiencing here but I think we're ready to go. I'm Captain Darrin Gunther. I'm Chief of Staff for Navy Region Hawaii. First I'd like to thank Commander Aleah McHenry. She's our Deputy Chief of Staff for hosting over the last several days. Over that time, we've seen some significant changes in this work to restore your safe water in your homes. And as you'll see from today's map, only four zones remained to have their water certified in the information for those zones is currently at the Hawaii Department of Health for their review and ultimate decision on amending the health advisory for those zones and neighborhoods. We continue to hear questions, good questions from some of you on the water sampling and testing. And so what we're going to do today is we're going to bring Mr. Luis Garcia-Bakarich, he's with the Environmental Protection Agency. He's going to be on to discuss some of those important questions that you have. But first, let's go to the map and give you an update on where we stand. So this map is posted on both of our information, water information websites, the resource website, the link for it is in the upper right hand corner, and you can just click that you're one click away from getting directly to this page. If you go to the Data page, the water data page itself, you can also navigate to both of these the table view as well as the Map View separately there. So we are currently standing at 15 zones that have their water certified for as safety use for all uses by the Hawaii Department of Health. That includes 8,765 homes of a total of 9715 homes on the Navy water system. That's over 90%. Now our movements are complete in 13 of those 15 zones. That includes Ford Island that includes Pearl City Peninsula, McGrew Point, Halewa Housing, and includes Camp Smith, Red Hill neighborhood. All three zones in the Aliamanu Military Reservation neighborhood. That includes zone F2, which is a lot of neighborhoods over there from Halsey, Catlin Park, Maloelap, F1, Moanalua Terrace, NEX E1 is Makalapa, D1 is Hokulani and a Hale Moku and our Hickam Beach area I call it. That's D4 those movements are all complete in all of those zones. And we have moved movements in progress for two zones. So, D2 is Onizuka, Officer Field and Hale Na Koa, that area on Hickam that is there in day two of that move in day two of TLA benefits. And A3 that's Iroquois point is on day one of benefits. Day two, last day is tomorrow there. Four zones remaining. So four zones, the first and biggest that impacts a lot of our families out there is D3 Earhart. So that package the information and data sampling and testing packages at the Department of Health. They're reviewing that now. That's for D3 or Earhart. Additionally, we have C2, C3 and C1 that's the sub base. There are no homes there, but there are a couple of small neighborhoods in C2 and C3. That's Hale Alii. It's Marine barracks and Hospital Point those



zones in neighborhoods. Also the information is at the Hawaii Department of Health for their review, currently. Alright, and that's our map update for today.

Capt. Guenther 4:29

Okay, what I'd like to do now is bring in our guests, you know, the progress towards certification of your water includes first and foremost the Interagency Drinking Water Team before it goes to the Department of Health for that certification and amendment of their health advisory. And that interagency drinking water team includes some of the services the Army and Navy, as well as the Hawaii Department of Health as well as the Environmental Protection Agency. And their primary focus has been determining if fuel from the incident is... remains in the water, if that water is clear, but it also, that team has been testing for other elements that are in the water. So to explain that and talk about that we're joined by Luis Garcia-Baka-rich, he's an environmental protection specialist with EPA region nine. And he that's the drinking water office with the EPA, he's been with this office for 15 years. And he's worked on projects like Superfund Clean Water Act and Safe Drinking Water Act programs. So, Luis is first and foremost, welcome back. Thank you for joining us.

LUIS GARCIA-BAKARICH 5:48

Thank you, Captain for having me back.

Capt. Guenther 5:51

If I could first go into you know, some questions that we have and walk you through and see what your thoughts are on this. First of all, the testing of the water in homes after the flushing is an important part of restoring the safe water and validating that, that it is clean. But I understand you're not just testing for fuel components. Can you talk about what else you're testing for?

LUIS GARCIA-BAKARICH 6:20

Yeah, absolutely. As you correctly mentioned, the IDWST sampling is much greater than just petroleum. You know, as you and many of the viewers here will probably have heard multiple times, total petroleum hydrocarbons, which is kind of one of the main focuses of testing has a lot of different ingredients. And while the sampling that we were doing does primarily look for the regulated components of jet fuel, we've also been looking for metals and other indicators such as total organic compounds, that might represent changes within the distribution system



as a result of the flushing. You know, and I would also like to kind of underscore that the Safe Drinking Water Act also requires regular monitoring such as for coliform bacteria to make sure that the water remains safe to drink. And so there is, you know, as much as the IDWST has been focusing on this incident, there is a lot of water quality monitoring, that is ongoing. And, and there's a lot of information about there that indicates that the water quality is, is much improved.

Capt. Guenther 7:42

Can you Luis, can you talk about what you did find in the water? And if if there was anything that exceeded those standards set by the interagency drinking water team?

LUIS GARCIA-BAKARICH 7:57

Yeah, absolutely. I'd like to begin a little bit with my response by talking about how EPA develops our maximum contaminant levels. And really, this has to do with the fact that a number of the standards that were set by the IDWST, were based on EPA's MCLs. Again, that's the maximum contaminant levels and these levels well established by EPA have also been adopted by the Hawaii Department of Health. So we have a fairly equal way of looking at water drinking water quality throughout the state and and throughout the country. When EPA develops our MCL maximum contaminant levels, we consider long term exposure. So we're talking about it regular daily exposure over many years of a person's life. And so, in that, and that is really how we protect public health in the development of these standards. And in doing so, we do also consider not not just the characteristics of the contaminants themselves, but also any impacts that they may have on potential sensitive subpopulations, especially children. With respect to the specific exceedances. There, you know, we have seen exceedances in both the distribution system and in buildings, beginning with the distribution system. There were 13 and total and 12 of those 13 were a lab error. These were false positives associated with the BCEE that I spoke about the last time that I was here. There has also been one exceedance for total petroleum hydrocarbons in the distribution system. In the buildings, both residential and non-residential buildings, including schools and child development centers. There have been 18 exceedances there are five, five of those were actually also associated with lab contamination, which resulted in false positive, because of Bis(2-ethylhexyl) phthalate or DEHP. So, so really, there were 13 exceedances, that we, we focused in on of those, there were five for petroleum hydrocarbons, two for beryllium, two for lead, one for methylene, chloride, and three for total organic compounds. I do want to kind of also emphasize that while we did find these



exceedances, and we went back for all exceedances, as, as well as the false positives, and resampled other locations where these exceedances were detected, and all of the follow up sampling resulted no detectable results for for those specific contaminants, or really for any of the other contaminants that were evaluated in those samples.

Capt. Guenther 11:10

Luis, can you talk about what you said that each of those exceedances, there was a resampling process that occurred? And the resamples all showed no detections of what you were looking for. But what was required when you had an exceedance? What was required? And what did you do after you had that exceedance to get to that point where you finally resampled?

LUIS GARCIA-BAKARICH 11:35

Yeah, so I think, you know, it's important to understand really the purpose of the initial sampling to begin with, and that was, namely to evaluate the effectiveness of the flushing as the primary remedy for cleaning up the the drinking water system. And so where there was exceedances. The we treated them really on a case by case basis. But where we had exceedances, specifically of the either the health based standards of the MCLs, or of the total petroleum hydrocarbon standards that we had set for this incident is that our practice was to go back to the location, collecting a sample right away, reflush the location, and then collect another sample approximately 24 hours after flushing had completed. The purpose of doing this is really to see whether or not the contaminant that was detected as an exceedance remained at that location. And if so, that would be kind of covered from the first sample. And rather than kind of waiting to see if that has been the you know, whether or not to see, rather than waiting to see whether or not the contaminant actually still remained at that location, the IDWST didn't did another reflush tried to kind of just clean it out. And then again, take that that follow up sample a day later. And the purpose of that follow up sample was just in case the initial sample came back with either a detection or an exceedance. To see, you know, how effective was flushing after that, that, that resample. And so, the goal is, is to basically, as I said at the beginning, you know, the purpose of the sampling is to determine how effective the flushing is. And if we have a persistent problem at a location, how effective is subsequent flushing. Additionally, one last thing on this is that we would, in certain circumstances, attempt to where we didn't have sample locations nearby, upstream or downstream from the exceedance, we would try to take other samples from other locations, buildings, for example, or homes near the initial exceedance to try and establish basically a bracket around the



exceedance. And you know, if there is a persistent problem at a particular location, we would like to know, is this specific to, you know, one individual house, or is it does it affect kind of a larger area within the neighborhood? And so that was really the intent of the, you know, basically, our response and conducting an investigation into the nature of the exceedance.

Capt. Guenther 14:34

Luis, thank you. How can people find out more information about their drinking water sample results, or the safety of their water in general?

LUIS GARCIA-BAKARICH 14:47

Yeah, absolutely. So, the Safe Drinking Water Act requires public community water systems such as the Navy and the Army's water systems to provide what are called consumer confidence reports on an annual basis in these communities, excuse me, in these consumer confidence reports, the water system is first and foremost, required to report any violations of any of the health-based standards of the Safe Drinking Water Act. And then it also talks provides other information about sources of the water, any significant changes that there may have been as well as some of the most recent monitoring results? And I believe that you may have a link for where people can view historical past consumer confidence reports.

Capt. Guenther 15:36

Yeah, the way it's I sure do. It's you can get those water quality reports. From our CNIC webpage, it's

www.cnic.navy.mil/regions/cnrh/om/environmental/water_quality_information.html. Or maybe easier, I think our staff here is in putting into the comments, that link or you can do a search on Google for Navy water quality reports. And those all those historical reports are available going back. Luis, I have a wonderful, one follow on question for me. Sure.

LUIS GARCIA-BAKARICH 16:32

One last thing to I had one last follow up, apologize for the delayed jumping on the ball there. But you know, I know that a lot of people are also really interested in receiving, you know, learning more about the results of the IDWST sampling of their specific homes. And I and I certainly appreciate and recognize what a challenge it is for, for residents to, you know, basically actually get and see the results. And to that the IDWST is working on a way to make it easier for people to find their individual buildings specific sampling results.



Capt. Guenther 17:19

Okay, that's helpful, certainly helpful for our residents. I think. I have a question from one of our followers, and I'll read it to you. She did a quick Google search on a couple of elements reported on our test results that I'd like to ask you about. One is benzyl butyl phthalate. And one is dioctyl phthalate. Her search showed that these are harmful to humans, but the summary posted to the web page claims they aren't harmful and she's seeking some clarification. I wonder if you can answer that question.

LUIS GARCIA-BAKARICH 17:56

Yeah, thank you. Um, you know, I think first and foremost is that the danger associated with these chemicals is entirely based on the concentrations at which they are present. And so while these chemicals certainly may be harmful, I believe that they have not been detected at harmful levels at harmful concentrations. So dioctyl phthalate is also another name for bis-2 ethylhexyl phthalates or D E H P that I talked about a little bit earlier. And again, those results were attributed those exceedances were attributed exceedances and detections, I should say were attributed to contamination within the laboratory and that there the laboratory did issue a Corrective Action Memo that kind of clarifies this. Now the benzyl butyl phthalate you know, it may have been detected, but as I previously mentioned, it did not exceed the health based standard. And so, and again, the, you know, our health-based standards are based on long term exposures. And so, that is, you know, so again, they may have been detected, they may be the chemicals can be hazardous, but again, it really it all depends on the concentrations at which those contaminants are present.

Capt. Guenther 19:34

Okay, Luis, thank you so much. I really appreciate your insights on those and thank you for being with us. And first and foremost, thank you for your support to our community on this effort. So, thanks for coming on.

LUIS GARCIA-BAKARICH 19:50

It's been a pleasure to be here. Thank you for having me back.



Capt. Guenther 19:54

Okay, that was your daily water update for today. Please join us tomorrow. same time we're monitoring your questions on Facebook and you can email your questions to cnrhpao@gmail.com Don't forget to check out our water info website at navy.mil/jointbasewater and our water data page that's at JBPHH-safewaters.org. And make sure to check out the good stuff at greatlifehawaii.com/wegotyou. Please remember we're all in this together as one community and one ohana. Stay safe, take care of yourself. Take care of each other, and we'll see you next time.