



## JOINT BASE WATER DAILY UPDATE

Joint Information Center

(808) 471-5013

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[3/1/2022]

00:00:05 - 00:01:02

CMDR ALEAH MCHENRY

Hello everyone and welcome to the daily water update for March 1. I am Cmdr. Aleah McHenry Navy Region Hawaii deputy chief of staff and I am covering today for Captain Guenther. As we work to restore water to your homes, we are committed to continue these updates to address your concerns and your questions. One of the concerns that you have shared comes from the presence of Bis(2-chloroethyl)ether or BCEE for short in some of the water samples taken after in-home flushing. Today, we are going to be joined by Mr. Luis Garcia-Bakarich with the Environmental Protection Agency or EPA. He will be addressing some of the questions that are important to you and have been asked. Before Luis joins us, we'll take a look at the flushing map.

00:01:03 - 00:02:22

CMDR ALEAH MCHENRY

So as you can see on this map, and I know last week Captain Guenther did go through it, we're going to go through just what the bright green zones are for A1 and I1. That means that there was an amended health advisory issued and those zones were cleared and folks are now in their homes. And that's red hill housing and Pearl City Peninsula. For the striped green, HU and D1 zones, they are currently awaiting zone clearance, meaning that they're with the Department of Health, those are Hale Moku and Hokulani neighborhoods as well as Ford Island. And so these we anticipate this week getting clearance for and notification going to residents for them to return to their homes. What we also see is the orange stripes that are all still under review. They are under IDWST review. And once that review is complete, they will be sent to the Department of Health for review and clearance as well. Any updates that we have of any of the zone clearances will be on our website and will be immediately, a notification sent out immediately following. That's all we have for the map review for today. Thank you.

00:02:23 - 00:03:54

CMDR ALEAH MCHENRY

A vital component of the Interagency Drinking Water System Team or IDWST which we talked about over when we were going through the map is a work to return to safe drinking water, and has been the testing of water to see if any remnants of fuel compounds are still in the water. This testing also identifies other compounds in the water samples. One of the samples a mainland lab identified was a chemical compound called Bis(2-chloroethyl)ether or BCEE. BCEE was initially identified in lab analysis in the Navy water system sample of results from fire hydrants in eight of 19 flushing zones, which were collected between Jan. 6 and Jan. 12. BCEE is not typically found in drinking water, and its presence sparked questions from you. To address the presence of BCEE we're joined today by Mr. Luis Garcia-Bakarich who is an environmental protection specialist in the Region 9 drinking water office within the Environmental



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Protection Agency. Luis has been with the EPA for 15 years serving in the Superfund Clean Water Act and Safe Drinking Water Act programs. Welcome Luis. What can you tell us about BCEE?

00:03:53 - 00:03:54

LUIS GARCIA-BAKARICH

Thank you, Commander McHenry.

00:03:55 - 00:04:02

CMDR ALEAH MCHENRY

I'm sorry. Hi, sir. What can you tell us about BCEE and the findings we've seen so far.

00:04:08 - 00:05:10

LUIS GARCIA-BAKARICH

Thank you, Commander McHenry. The EPA is part of the IDWST and the team has been working hard these past months to restore water quality for residents to safely use. I know initial reports of BCEE may have caused great concern with area residents and occupants who rely on this water. So I'm here to answer some of the questions that have been coming in. First and most importantly, the EPA is convinced that the original PCE lab reports were false positives, meaning that BCEE is not actually in the drinking water. The original lab tests for BCEE came from an independent third party laboratory and the results were taken very seriously by the IDWST. The EPA's laboratory subject matter experts reviewed Navy's analysis of those lab reports and agree with the conclusion that BCEE is not present in the drinking water system and the report, the original report was based on a laboratory error.

00:05:11 - 00:05:51

LUIS GARCIA-BAKARICH

The laboratory Eurofins, based in Seattle, reevaluated their initial data and acknowledged that they reported the presence of BCEE in error for all 12 detections. Eurofins has revised the reports and included a narrative of the mistake. The revisory, the, excuse me, the revised reports now correctly state that BCEE is not detected. The IDWST investigates every contaminant result that exceeds drinking water standards. And the investigation process includes evaluating multiple lines of evidence to protect public health.

00:05:52 - 00:06:50

LUIS GARCIA-BAKARICH

While, we can confidently call this a lab error at this point, the IDWST has also taken the added precaution of resampling all locations where BCEE was originally detected.



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BCEE was not detected in any of those resampling results. In the meantime, the Hawaii Department of Health public health advisory remains in effect for the zones that have not yet been amended. Navy water system users should not use the water for drinking, cooking, oral hygiene, or bathing while these zones remain under review. The IDWST will perform a thorough review of all results and actions including the resampling for these zones before submitting a package for Hawaii Department of Health review. Once the Hawaii Department of Health determines that water is safe to drink, Hawaii Department of Health will amend the health advisory for each zone as appropriate. Thank you.

00:06:51 - 00:07:14

CMDR ALEAH MCHENRY

Thank you, sir. So if I could just recap and summarize a bit. So the original tests that were received the results were likely a false positive. There were additional test taking which showed no reason to believe that BCEE compound was in any of the water to begin with and that it was a lab testing error.

00:07:15 - 00:07:16

LUIS GARCIA-BAKARICH

That is correct.

00:07:16 - 00:07:21

CMDR ALEAH MCHENRY

Ok, thank you. So how is BCEE commonly used?

00:07:22 - 00:08:28

LUIS GARCIA-BAKARICH

So, BCEE is primarily used as a chemical in the making of pesticides. But a small amount of it is actually used as a solvent in industry. EPA's toxic release inventory information identified that in 2020, only 18 large companies across the country actively use BCEE so it's a fairly rare chemical that we see. The ATSDR, that's the Agency for Toxic Substances and Disease Registry, developed a toxicological profile for BCEE, which was actually updated as recently as 2017. It did identify past use of BCEE in the purification of oils and gasoline and a current use of BCEE as a microbicide and corrosion inhibitor in the petroleum industry. It's unclear if that means if it is a product within the fuels themselves, or if it is used in one or more of the many steps of fuel production.

00:08:29 - 00:08:39

CMDR ALEAH MCHENRY

Okay, so then I guess if the BCEE or other compounds are not really related to fuel, then why is the reason we test for them?



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00:08:40 - 00:09:09

LUIS GARCIA-BAKARICH

So, thank you. While BCEE may not be an ingredient in the fuel, it is an ingredient of other chemicals that can be. The sampling method that looks for those targeted chemicals can also detect BCEE when the lab issues their report for the targeted chemicals, they most often report on all the chemicals that can be revealed by the testing method. So you get a much more complete report that way.

00:09:10 - 00:09:27

CMDR ALEAH MCHENRY

Okay, so if I'm understanding right, so even though it's not a component of fuel itself, it can be part of the process for other items that would test appropriately. Sorry, I want to make sure that I understand.

00:09:28 - 00:09:56

LUIS GARCIA-BAKARICH

Absolutely. The testing method that was utilized is much more of a broad spectrum. It looks across the spectrum of chemicals. And so some of those chemicals are associated with fuels, some are not. BCEE most likely being among those that is not included in fuel. But it would still be part of the lab report.

00:09:57 - 00:10:07

CMDR ALEAH MCHENRY

Perfect. Thank you very much for that. So is BCEE the same as DEHP. Can you kind of talk about that?

00:10:08 - 00:11:05

LUIS GARCIA-BAKARICH

Oh, yeah, sure. So, DEHP, that's Bis(2-ethylhexyl) phthalate may kind of seem somewhat similar, it really is an entirely different chemical compound. The DEHP is frequently used in the production of polyvinyl chloride more commonly known as PVC. And it is not known to be a component of JP-5 fuel. But DEHP can be revealed through the the same analytical method that we talked that we just talked about.

00:11:06 - 00:11:23

CMDR ALEAH MCHENRY

So, with the lab error that occurred, how can we trust any of the other lab results? I know that that's something that folks have been asking and are concerned with. How many labs are being used? And how can we trust the lab results that we're receiving?

00:11:24 - 00:12:43



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LUIS GARCIA-BAKARICH

Yeah, absolutely. So a tremendous amount of quality insurance goes into each individual laboratory report. The laboratories themselves are certified by the states in which they're located, or by EPA itself if the state does not have a Laboratory Accreditation Program. Laboratories are required to document when problems occur during testing, which does happen on occasion. And while laboratories have rigorous review systems in place to prevent errors, in this instance, the lab did not catch this error through their own quality control process. The lab was able to identify why the error occurred and has implemented corrective action that was put into place for the resampling effort that I previously mentioned. I actually am not sure how many labs are currently being used. I have personally reviewed reports from at least three different labs that are being used. But I'm not sure if that is the extent of all the labs that are being used. Perhaps the Navy might be able to answer that one more clearly.

00:12:44 - - 00:13:38

LUIS GARCIA-BAKARICH

Perfect, thank you so much. And so my understanding is that, you know, with all quality control that labs can have results that are questioned or we want to find out a little bit more about and so that's why we retest, double check the quality control and then kind of change the process to ensure that it doesn't happen again, or to at least mitigate that risk. Is that correct?

00:13:09 - 00:13:39

LUIS GARCIA-BAKARICH

Yeah, that's fair to say. And, you know, there's, there are multiple levels of review. And I think in that particular instance, with BCEE, the Navy was able to take a much deeper look into the underlying laboratory data and was able to identify the problem, and was able to very clearly demonstrate that BCEE was not present and that this was truly a laboratory error.

00:13:40 - 00:14:00

LUIS GARCIA-BAKARICH

Thank you so much. So another question was, with the BCEE exceedance, that was released in initial lab reports, why did it take so long to notify everyone that, or inform people, excuse me, about the lab error?

00:14:01 - 00:14:44

LUIS GARCIA-BAKARICH

Well, I would like to start off by saying that all zones where BCEE were originally detected remain under the DOH drinking water advisory. As with all data, the IDWST approach the errors with careful and thoughtful review. From EPA's perspective, we needed to consult with our regional laboratory and quality assurance subject matter



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experts. Before we can support the conclusion that there is no BCEE in the drinking water. While I certainly appreciate that, it feels like the process has taken a long time, the IDWST will take the time we need to protect people's health and develop a sound and scientific basis for determining that the water is safe to drink.

00:14:45 - 00:14:55

LUIS GARCIA-BAKARICH

Thank you so much Luis for being here with us answering those questions and for all of your insight. We do really appreciate you being here. Thank you.

00:14:56 - 00:14:59

LUIS GARCIA-BAKARICH

It's been a pleasure. Thank you.

00:15:00 - 00:15:42

CMDR ALEAH MCHENRY

Okay, team. So that was our daily water update. Please join us tomorrow at the same time. We are monitoring your questions on Facebook and you can also email them to [CNRHPO@gmail.com](mailto:CNRHPO@gmail.com). Any recent updates or information that's available will be uploaded to our website at [navy.mil/jointbasewater](http://navy.mil/jointbasewater). And you can also check out any updates on testing information or water maps at [JBPHH-safewaters.org](http://JBPHH-safewaters.org). Please stay safe. Take care of yourself and your families and we'll see you tomorrow. Thank you.