

DEPARTMENT OF THE NAVY

COMMANDER FLEET ACTIVITIES SASEBO, JAPAN PSC 476 BOX 1 FPO AP 96322-0001

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From: Commander, Fleet Activities Sasebo

To: Parents and Staff

Subj: SASEBO TEEN CENTER (BUILDING 508) DRINKING WATER

Encl: (1) Overview of Testing Results for Lead in Drinking Water and Corrective Actions for CFAS Sasebo Teen Center (Building 508)

- (2) Sasebo Teen Center LIPA Results Summary Table-May 2020
- (3) CFAS 508 Teen Center Exceedances Floor Plan

I want to make you aware of the latest developments regarding our efforts to address elevated lead levels in drinking water that were reported on 17 October 2019 at the Commander, Fleet Activities Sasebo Teen Center.

Recall, that on 18 October 2019, I informed you of the results of recent water testing of seven outlets at the Sasebo Teen Center. Of these, one outlet tested higher than 15 parts per billion (ppb) screening level for lead. This is the Navy's designated level for action with additional testing and corrective measures.

We recently completed all corrective measures and additional testing showed that the levels at the Sasebo Teen Center are all below the screening level of 15 ppb.

Specifically, after the initial findings, we took the following corrective actions:

• We replaced an outdoors hose faucet by the main entrance to the Teen Center with a new faucet. We conducted additional water sampling following this corrective measure, and the result confirms that the water from this faucet is now below the screening level of 15 ppb for lead.

I've attached the complete set of test results, which include the list of sampling locations and the purpose of the water outlet. As described above, for those locations that exceeded the recommended screening level on the first test, we conducted a follow-on resampling. The attachment provides details on which outlets required corrective action and the actions taken. For outlets where corrective actions were implemented, the attachment also shows the results of follow-on sampling to confirm lead levels below 15 ppb. I've also enclosed a floor plan which delineates locations where initial water sampling results exceeded 15 ppb. All outlets at the Sasebo Teen Center are now below the screening level.

For your information, I am also including links to additional drinking water quality resources:

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Environmental Protection Agency (EPA) (lead in drinking water in schools and day care centers):

https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities

Annual water quality report for the installation:

https://www.cnic.navy.mil/regions/cnrj/installations/cfa sasebo/om/public works/.html

Please be assured that my team and I will continue to monitor and test water quality at the Sasebo Teen Center to ensure our drinking water complies with EPA regulations. If you have any concerns at all, please contact my Environmental Team, Ms. Elizabeth Barris (DSN 315-252-3369, elizabeth.barris@fe.navy.mil) and Mr. Frederick S. Pianalto (DSN 315-252-3263, frederick.pianalto@fe.navy.mil).

If you have any health related questions or concerns about lead exposure, you are encouraged to contact your health care provide or, if you are a TRICARE beneficiary, use the Region Appointment Center to schedule an appointment with your primary care provider at 1-877-678-1208 (+65-6339-2676 Japan).

Sincerely,

B. L. STALLINGS

Copy to: CNIC N45 NAVFAC N45 BHC Sasebo

Overview of Testing Results for Lead in Drinking Water and Corrective Actions for CFAS Sasebo Teen Center (Building 508)

The Navy is committed to maintaining safe drinking water on its installations. Sasebo City water supplied to the Navy and the Navy's water distribution system is regularly tested and in compliance with the Safe Drinking Water Act. Because lead exposure is a particular concern for children, and lead may be added to drinking water due to its presence in pipes, fittings, solder, and fixtures inside a building, the Navy policy requires that we test the lead content of drinking water in priority areas such as schools, youth centers (YCs), child development group homes (CDGHs), and child development centers (CDCs) every five years.

Navy environmental personnel conducted lead testing at the Sasebo Teen Center in accordance with Navy and EPA guidelines. Samples from various locations in the Teen Center were sent to a Navy–approved certified laboratory for analysis.

At the Sasebo Teen Center, outlets used for drinking, cooking, and washing were tested. Out of seven samples collected, two water outlets initially tested above the Navy screening level of 15 parts per billion (ppb) for lead in drinking water in schools and CDCs.

One of the two faucets that initially exceeded 15 ppb was a bathroom sink faucet at the main entrance, which tested at 65 ppb. Follow-up sampling at this outlet was conducted after removing and cleaning the faucet aerator. For example, a faucet aerator (or tap aerator) is often found at the tip of modern indoor water faucets. Without an aerator, water usually flows out of a faucet as one big stream. An aerator spreads this stream into many little droplets, which helps save water, provides more uniform flow, and reduces splashing. However, the aerator and screen can trap debris which can accumulate lead. A hose bibb vacuum breaker is attached to hose faucets to prevent backflow or back-siphonage into the water system.



After removing and cleaning the faucet aerator, retesting showed that bathroom sink faucet was below the screening level. The installation is implementing a periodic aerator maintenance plan to sustain this corrective action.

The remaining outlet that initially exceeded the screening level of 15 ppb was an outdoor hose faucet by the main entrance, which tested at 33 ppb. Since follow-up resampling indicated that the elevated levels of lead appeared to be caused by the components of the fixture, the faucet was shut down from use. A new faucet has been installed. Testing conducted after implementation of this corrective measure shows that the hose faucet is now below the screening level of 15 ppb.

A copy of all test results is enclosed for your information. The test results are presented in two tables:

- Table 1 <u>Summary of Results</u> summarizes the data by category of use (e.g., drinking, cooking, and washing).
- Table 2 <u>Summary Statistics</u> summarizes all the data.

A floor plan of the Sasebo Teen Center has also been included to show the locations for the fixtures that exceeded 15 ppb.

Table 1 provides a description of each sampling location using three columns; *Category*, *Sampling ID*, and *Outlet Description*. The *Category* column gives information about whether the outlet is used for drinking water (water fountain), cooking (food preparation), or washing (primarily hand-washing or brushing teeth). The *Sample ID* column is the identification used to label each sample bottle. The *Outlet Description* column contains additional information to describe the outlet sampled under each category.

The next set of columns in **Table 1** provide *Initial Sampling Results*, and for those locations that exceeded the recommended screening level of 15 ppb the follow-up *Re-sampling Results*.

EPA sampling protocol requires water to not be used for between 8 and 18 hours prior to first draw sampling. Therefore, *Initial Sampling Results were from* first draw samples collected early in the morning before the building opened and before any water was used. The *Initial Sampling Results* also indicate whether resampling is required and the date that fixtures greater than 15 ppb were secured. Outlets that exceeded 15 ppb are highlighted in yellow.

The *Re-sampling Results* includes columns for *First Draw* and flushing samples which help determine the source of lead. For cooking and washing outlets, aerators were removed and cleaned before retesting:

- If the lead concentration of the 30 second flush sample resulted in lower than 15 ppb lead, the aerators or other faucet attachments were the source of lead and the outlet can be used for drinking if the aerators or attachments are cleaned on a regular basis. The bathroom sink faucet by the main entrance fits in this category.
- If the lead concentration of the resampled first draw (but not the follow up 30 second flush) was greater than 15 ppb, the fixture was the source of lead. The outdoor hose faucet fits in this category. The faucet for this fixture has been replaced, and post-remediation testing shows that the results are less than 15 ppb.
- If the lead concentration of the sample following the 30 second flush was greater than 15 ppb and greater than the lead concentration of the first draw resample, the source of lead is the plumbing upstream of the outlet. None of the two faucets that were resampled after initial exceedance fit this category.

The *Corrective Actions* column describes actions that were taken to remediate the source of lead. In the event that fixtures or upstream piping are replaced (e.g. outdoor hose faucet by the main entrance), there are columns for sampling data that confirms that the corrective actions were successful in reducing lead below15 ppb.

To learn more about lead in drinking water in schools and day care centers visit the following EPA website: https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities.

To learn more about the installation's public water supply, see our annual water quality report: https://www.cnic.navy.mil/regions/cnrj/installations/cfa sasebo/om/public works/.html

To answer any questions you may have on the sampling program, contact my Environmental Team, Ms. Elizabeth Barris (DSN 315-252-3369, elizabeth.barris@fe.navy.mil) and Mr. Frederick S. Pianalto (DSN 315-252-3263, frederick.pianalto@fe.navy.mil).

If you have any health questions or concerns, you are encouraged to contact your health care provider or, if you are a TRICARE beneficiary, use the Region Appointment Center to schedule an appointment with your primary care provider at 1-877-678-1208 (+65-6339-2676 Japan).

Enclosures:

- 1. Complete Test Results
- 2. Floor Plan of the CDC

Table 1. Summary of Results		Sasebo Teen Center										
SAMPLING LOCATION DESCRIPTION			INITIAL SAMPLING RESULTS RE-SAMPLING RESULTS					CORRECTIVE ACTIONS	POST REMEDIATION SAMPLING RESULTS			
				commeded Leve	= 15 parts per billion (ppb)				Recommeded Level = 15 ppb			
CATEGORY Water Intended For:	SAMPLE ID	Room Number - Outlet Description	Comments	First Draw (ppb)	Retest required?	Date Fixture Secured? (See Note 1)	Water Fountain 15 min. Follow up Flush Sample - Collected day before First Draw Sampling (ppb)	First Draw (ppb)	Follow up Flush - Collected 30 seconds after First Draw Sampling (ppb)	Description	First Draw (ppb) (See note 2)	Follow up Flush - Collected 3G seconds after First Draw Sampling (ppb)
SAMPLING DATE				6/20/2019				9/14/2019	9/14/2019		4/1/2020	
RESULTS DATE				8/28/2019				10/17/2019	10/17/2019		5/1/2020	
COOKING	508-F-1-19	KITCHEN	FAUCET	0.86	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WASHING	508-F-2-19	TOILET BY MAIN ENTRANCE	FAUCET	65.0	YES	9/4/2019	N/A	8	1.9	AERATOR MAINTENANCE	N/A	N/A
WASHING	508-F-5-19	TOILET BY MAIN ENTRANCE	FAUCET	2.9	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WASHING	508-F-6-19	TOILET IN TV RM	FAUCET	3.6	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WASHING	508-F-7-19	TOILET IN POOL TABLE RM	FAUCET	1.2	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DRINKING	508-C-8-19	POOL TABLE RM	COOLER	0.71	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WASHING	508-F-9-19	OUTSIDE FAUCET BY MAIN ENTRANCE	FAUCET	33.0	YES	9/4/2019	N/A	27	1.2	REPLACE FAUCET	1.4	N/A

Table 2. Summary Statistics										
CATEGORY	INITIAL SAMPLING RESULTS	RE-SAMPLING RESULTS				POST REMEDIATION RESULTS				
	Recommeded Level = 15 parts per billion (ppb)									
	First Draw (ppb)		First Draw (ppb)	Follow up Flush - Collected 30 seconds after First Draw Sampling (ppb)		First Draw (ppb)				
Total Drinking	1		0	0		0				
Total Drinking > 15 ppb	0		0	0		0				
Total Cook/Brush	1		0	0		0				
Total Cook/Brush > 15 ppb	0		0	0		0				
Total Washing	5		2	2		1				
Total Washing > 15 ppb	2		1	0		0				
Total Samples	7		2	2		1				
Total Samples > 15 ppb	2		1	0		0				

Notes: N.D. is Not-Detected above laboratory reporting limit.

Affected outlets were immediately secured after receiving verbal communication from the lab on results exceeding the recommended level of 15 ppb.

Faucet replacements were implemented. Post-remediation sampling was conducted on 4/1/2020 and final results below recommended level of 15 ppb as shown on the table.

