

## **DEPARTMENT OF THE NAVY**

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> 5090 Ser JB4/1044 28 Sep 2020

From: Commander, Joint Base Pearl Harbor-Hickam

To: Staff and Patrons of Joint Base Pearl Harbor-Hickam Center Drive Child Development Center

(Building 930)

Subj: SAMPLING AND TESTING FOR LEAD IN DRINKING WATER AT CENTER DRIVE

CHILD DEVELOPMENT CENTER

Ref: (a) OPNAVINST 5090.1E, Environmental Readiness Program

Encl: (1) Overview of Testing Results and Corrective Actions for Center Drive CDC (Building 930)

- 1. I am pleased to report that all water intended for consumption at this Child Development Center (CDC) has tested below the Environmental Protection Agency's (EPA's) lead screening level of 15 parts per billion (ppb). Initial results identified that two outlets at Center Drive CDC did not meet EPA's lead screening level. Shortly after receiving the initial results, we took those outlets out of service and performed corrective actions. Follow-up sampling identified that the two outlets at Center Drive CDC are now compliant with EPA's lead screening level and no further action is required. Enclosure 1 of this letter provides a summary of all sampling results for the entire facility.
- 2. These tests are conducted every 5 years, and samples are taken from all sources water used for drinking, cooking, or washing at all Youth Centers (YCs) and CDCs. Our latest tests were conducted in April 2020.
- 3. Per reference (a), we have adopted the EPA's recommendation that we test the lead content of drinking water in priority areas such as YCs and CDCs as policy and made this a top priority. Our environmental personnel conducted this testing following Navy and EPA guidelines, and samples were sent to a state-certified or accredited laboratory for analysis.
- 4. My team and I will continue to monitor and test water quality at all of our YCs and CDCs to ensure our water is safe to drink and use. I remain committed to the safety and health of all personnel and family members using our facilities and will keep you updated as necessary.
- 5. If you have questions regarding the sampling program, please contact our Installation Environmental Program Director at (808) 474-0392 or steven.christiansen@navy.mil.

R. E. HARMEYER CAPT, CEC, U.S. Navy By direction

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## Overview of Testing Results and Corrective Actions for Center Drive CDC (Building 930)

At the Center Drive CDC, outlets used for drinking, cooking, and washing were tested. Out of 146 samples collected, two water outlets initially tested above the screening level of 15 parts per billion (ppb) for lead in drinking water in schools and childcare centers.

The first sampling event took place on November 2, 2019. We received the test results on November 22, 2019 which included two exceedances. We took those outlets out of service shortly after and conducted follow up sampling on November 27, 2019 and April 3, 2020 to verify the results. Summary table of the results from the first and follow-up samples for the two outlets:

		First	Fol	Follow-up Sample (ppb)		
Outlet	Outlet	Sample	First		Additional	Comments and
ID#	Description	(ppb)	Draw	Flush	Confirmation	Corrective Actions
98	Toddler Sink	15	3.4	1.1	Not Required	Most likely from debris in aerator. Regular
	(Rm. 116)					cleaning of the aerator is recommended
3	Kitchen Sink	20	35	2.2	9	Most likely source of lead was from the fixture.
						Fixture was replaced on 03/03/20 and retested
						on 04/03/20. The retesting result was below the
						screening level.

A complete summary results table (enclosure 2) is enclosed for your information. The *Building #* and *Room #* indicate the location of the fixture. The *Outlet Map #* corresponds to the location indicated on the floor plan of the CDC (enclosure 3). 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 *Outlet Description* column contains additional information to describe the outlet. The next set of columns provide *Initial Lead Results*, and for those locations that exceeded the recommended screening level of 15 ppb the *Follow-up Lead Results*.

EPA sampling protocol requires water to not be used for between 8 and 18 hours prior to first draw sampling. Therefore, *Initial Lead Results* were from first draw samples collected early in the morning before the CDC opened and before any water was used. The *Initial Lead Results* also indicate whether resampling is required.

The *Follow-up Lead Results* includes columns for *First Draw* and *Flush* samples, which help determine the source of lead:

- If the lead concentration of 30 second flush sample resulted in lower than 15 ppb lead, the <u>aerators</u> were the source of lead and the outlet can be used for drinking if the aerators are cleaned on a regular basis.
- 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. These fixtures can be used if water is flushed for 30 seconds before first use of the day or if the fixtures are replaced and retesting confirms that the new fixtures do not leach lead.

• 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. These outlets should be disconnected unless upstream plumbing is replaced.

The *Comments* column indicates additional information regarding the fixture and actions to remediate the source of lead if detected.

Enclosure (1)

## LIPA Test Results JBPHH - Center Drive CDC (Building # 930)

Initial Sample Date: 11/02/19, Results Date: 11/22/19

Follow-up Sample Date: 11/27/19, Results Date: 12/07/19

Building	Room	Outlet		Outlet	Initial Lead	Follov	v-up Lead Result		ite. 11/2//19, Results Date. 12/0//1
#	#	Map #	Category	Description	Results (ppb)	First Draw	Flush	Confirmation	Comments
930	101	133	Washing	Adult Sink	0.63	Not Sampled	Not Sampled	Not Required	
930	101	134	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	101	135	Washing	Toddler Sink - Sensor	2.7	Not Sampled	Not Sampled	Not Required	Sink is not used
930	102	130	Washing	Adult Sink	1.4	Not Sampled	Not Sampled	Not Required	
930	102	131	Washing	Adult Sink	1.3	Not Sampled	Not Sampled	Not Required	
930	102	132	Washing	Toddler Sink - Sensor	10	Not Sampled	Not Sampled	Not Required	Sink is not used
930	103	127	Washing	Adult Sink	0.54	Not Sampled	Not Sampled	Not Required	
930	103	128	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	103	129	Washing	Toddler Sink	5.6	Not Sampled	Not Sampled	Not Required	
930	104	124	Washing	Adult Sink	3.9	Not Sampled	Not Sampled	Not Required	
930	104	125	Washing	Adult Sink	6.7	Not Sampled	Not Sampled	Not Required	
930	104	126	Washing	Toddler Sink - Sensor	3.3	Not Sampled	Not Sampled	Not Required	Sink is not used
930	105	121	Washing	Adult Sink	0.53	Not Sampled	Not Sampled	Not Required	
930	105	122	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	105	123	Washing	Toddler Sink - Sensor	3.4	Not Sampled	Not Sampled	Not Required	Sink is not used
930	106	118	Washing	Adult Sink	0.6	Not Sampled	Not Sampled	Not Required	
930	106	119	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	106	120	Washing	Toddler Sink - Sensor	9.3	Not Sampled	Not Sampled	Not Required	Sink is not used
930	107	115	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	107	116	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	107	117	Washing	Toddler Sink - Sensor	3.9	Not Sampled	Not Sampled	Not Required	Sink is not used
930	108	112	Washing	Adult Sink	0.61	Not Sampled	Not Sampled	Not Required	
930	108	113	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	108	114	Washing	Toddler Sink - Sensor	3	Not Sampled	Not Sampled	Not Required	Sink is not used
930	109	109	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	109	110	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	109	111	Washing	Toddler Sink - Sensor	1.7	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	110	106	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	110	107	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	110	108	Washing	Toddler Sink - Sensor	0.98	Not Sampled	Not Sampled	Not Required	
930	111	103	Washing	Adult Sink	0.85	Not Sampled	Not Sampled	Not Required	
930	111	104	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	111	105	Washing	Toddler Sink - Sensor	4.9	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	112	100	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	

(EPA Limit is 15 ppb) Enclosure (2)

Building	Room	Outlet		Outlet	Initial Lead	Follov	v-up Lead Result		
#	#	Map#	Category	Description	Results (ppb)	First Draw	Flush	Confirmation	Comments
930	112	101	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	112	102	Washing	Toddler Sink - Sensor	1.8	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	116	96	Washing	Adult Sink	0.64	Not Sampled	Not Sampled	Not Required	
930	116	97	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	116	98	Washing	Toddler Sink - Sensor	15	3.4	1.1	Not Required	Most likely source of lead was debris in aerator; regular cleaning of aerator is recommended
930	117	93	Washing	Adult Sink	0.68	Not Sampled	Not Sampled	Not Required	
930	117	94	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	117	95	Washing	Toddler Sink - Sensor	6.6	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	118	85	Washing	Adult Sink	1.2	Not Sampled	Not Sampled	Not Required	
930	118	86	Washing	Adult Sink	0.88	Not Sampled	Not Sampled	Not Required	
930	118	87	Washing	Toddler Sink - Sensor	1.4	Not Sampled	Not Sampled	Not Required	
930	118	88	Washing	Toddler Sink - Sensor	1.3	Not Sampled	Not Sampled	Not Required	
930	118	89	Drinking	Toddler Combination Sink - Water Fountain	2.2	Not Sampled	Not Sampled	Not Required	
930	118	90	Washing	Toddler Combination Sink - Faucet	Not Detected	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	118	91	Drinking	Toddler Combination Sink - Water Fountain	0.76	Not Sampled	Not Sampled	Not Required	
930	118	92	Washing	Toddler Combination Sink - Faucet	1.2	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	119	77	Washing	Adult Sink	5.6	Not Sampled	Not Sampled	Not Required	-
930	119	78	Washing	Adult Sink	0.52	Not Sampled	Not Sampled	Not Required	
930	119	79	Washing	Toddler Sink - Sensor	0.98	Not Sampled	Not Sampled	Not Required	
930	119	80	Washing	Toddler Sink - Sensor	1.8	Not Sampled	Not Sampled	Not Required	
930	119	81	Washing	Toddler Combination Sink - Faucet	0.57	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	119	82	Drinking	Toddler Combination Sink - Water Fountain	1.7	Not Sampled	Not Sampled	Not Required	
930	119	83	Washing	Toddler Combination Sink - Faucet	0.62	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	119	84	Drinking	Toddler Combination Sink - Water Fountain	Not Detected	Not Sampled	Not Sampled	Not Required	
930	120	69	Washing	Adult Sink	1.6	Not Sampled	Not Sampled	Not Required	
930	120	70	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	120	71	Washing	Toddler Sink - Sensor	Not Detected	Not Sampled	Not Sampled	Not Required	
930	120	72	Washing	Toddler Sink - Sensor	1.2	Not Sampled	Not Sampled	Not Required	
930	120	73	Drinking	Toddler Combination Sink - Water Fountain	1.4	Not Sampled	Not Sampled	Not Required	
930	120	74	Washing	Toddler Combination Sink - Faucet	Not Detected	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	120	75	Drinking	Toddler Combination Sink - Water Fountain	Not Detected	Not Sampled	Not Sampled	Not Required	
930	120	76	Washing	Toddler Combination Sink - Faucet	0.71	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	121	61	Washing	Adult Sink	3	Not Sampled	Not Sampled	Not Required	
930	121	62	Washing	Adult Sink	0.65	Not Sampled	Not Sampled	Not Required	
930	121	63	Washing	Toddler Sink	0.69	Not Sampled	Not Sampled	Not Required	
930	121	64	Washing	Toddler Sink	1.1	Not Sampled	Not Sampled	Not Required	
930	121	65	Washing	Toddler Combination Sink - Faucet	1	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	121	66	Drinking	Toddler Combination Sink - Water Fountain	1.8	Not Sampled	Not Sampled	Not Required	

Building	lding Room Outlet			Outlet Outlet		Follov	v-up Lead Result	s (ppb)	
#	#	Map#	Category	Description	Results (ppb)	First Draw	Flush	Confirmation	Comments
930	121	67	Washing	Toddler Combination Sink - Faucet	2.3	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	121	68	Drinking	Toddler Combination Sink - Water Fountain	0.63	Not Sampled	Not Sampled	Not Required	
930	126	52	Washing	Adult Sink	1.1	Not Sampled	Not Sampled	Not Required	
930	126	53	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	126	54	Washing	Toddler Sink - Sensor	Not Detected	Not Sampled	Not Sampled	Not Required	
930	126	55	Washing	Toddler Sink - Sensor	0.72	Not Sampled	Not Sampled	Not Required	
930	126	56	Drinking	Toddler Combination Sink - Water Fountain	1.2	Not Sampled	Not Sampled	Not Required	
930	126	57	Washing	Toddler Combination Sink - Faucet	2.5	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	126	58	Drinking	Toddler Combination Sink - Water Fountain	Not Detected	Not Sampled	Not Sampled	Not Required	
930	126	59	Washing	Toddler Combination Sink - Faucet	2	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	127	44	Washing	Adult Sink	1	Not Sampled	Not Sampled	Not Required	
930	127	45	Washing	Adult Sink	0.59	Not Sampled	Not Sampled	Not Required	
930	127	46	Washing	Toddler Sink - Sensor	0.6	Not Sampled	Not Sampled	Not Required	
930	127	47	Washing	Toddler Sink - Sensor	0.76	Not Sampled	Not Sampled	Not Required	
930	127	48	Washing	Toddler Combination Sink - Faucet	3.8	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	127	49	Drinking	Toddler Combination Sink - Water Fountain	0.58	Not Sampled	Not Sampled	Not Required	
930	127	50	Washing	Toddler Combination Sink - Faucet	2.3	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	127	51	Drinking	Toddler Combination Sink - Water Fountain	0.51	Not Sampled	Not Sampled	Not Required	
930	128	36	Washing	Adult Sink	5.6	Not Sampled	Not Sampled	Not Required	
930	128	67	Washing	Adult Sink	0.95	Not Sampled	Not Sampled	Not Required	
930	128	38	Washing	Toddler Sink - Sensor	3	Not Sampled	Not Sampled	Not Required	
930	128	39	Washing	Toddler Sink - Sensor	4.6	Not Sampled	Not Sampled	Not Required	
930	128	40	Drinking	Toddler Combination Sink - Water Fountain	5.4	Not Sampled	Not Sampled	Not Required	
930	128	41	Washing	Toddler Combination Sink - Faucet	4.4	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	128	42	Drinking	Toddler Combination Sink - Water Fountain	4.9	Not Sampled	Not Sampled	Not Required	
930	128	43	Washing	Toddler Combination Sink - Faucet	4.9	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	129	28	Washing	Adult Sink	1.8	Not Sampled	Not Sampled	Not Required	
930	129	29	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	129	30	Washing	Toddler Sink - Sensor	0.73	Not Sampled	Not Sampled	Not Required	
930	129	31	Washing	Toddler Sink - Sensor	0.52	Not Sampled	Not Sampled	Not Required	
930	129	32	Washing	Toddler Combination Sink - Faucet	0.68	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	129	33	Drinking	Toddler Combination Sink - Water Fountain	0.68	Not Sampled	Not Sampled	Not Required	
930	129	34	Washing	Toddler Combination Sink - Faucet	0.62	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	129	35	Drinking	Toddler Combination Sink - Water Fountain	0.66	Not Sampled	Not Sampled	Not Required	
930	130	20	Washing	Adult Sink	2	Not Sampled	Not Sampled	Not Required	
930	130	21	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	130	22	Washing	Toddler Sink - Sensor	0.6	Not Sampled	Not Sampled	Not Required	
930	130	23	Washing	Toddler Sink - Sensor	0.9	Not Sampled	Not Sampled	Not Required	
930	130	24	Drinking	Toddler Combination Sink - Water Fountain	0.73	Not Sampled	Not Sampled	Not Required	

Building	Room	Outlet		Outlet	Initial Lead	Follov	v-up Lead Results	s (ppb)	
#	#	Map#	Category	Description	Results (ppb)	First Draw	Flush	Confirmation	Comments
930	130	25	Washing	Toddler Combination Sink - Faucet	Not Detected	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	130	26	Drinking	Toddler Combination Sink - Water Fountain	Not Detected	Not Sampled	Not Sampled	Not Required	
930	130	27	Washing	Toddler Combination Sink - Faucet	0.72	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	131	12	Washing	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	131	13	Washing	Adult Sink	0.6	Not Sampled	Not Sampled	Not Required	
930	131	14	Washing	Toddler Sink - Sensor	0.56	Not Sampled	Not Sampled	Not Required	
930	131	15	Washing	Toddler Sink - Sensor	8.9	Not Sampled	Not Sampled	Not Required	
930	131	16	Washing	Toddler Combination Sink - Water Fountain	0.77	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	131	17	Drinking	Toddler Combination Sink - Faucet	0.7	Not Sampled	Not Sampled	Not Required	
930	131	18	Washing	Toddler Combination Sink - Water Fountain	0.72	Not Sampled	Not Sampled	Not Required	Used for teeth brushing
930	131	19	Drinking	Toddler Combination Sink - Faucet	Not Detected	Not Sampled	Not Sampled	Not Required	
930	Bathroom 1	60	Washing	Adult Sink	0.84	Not Sampled	Not Sampled	Not Required	
930	Bathroom 2	99	Washing	Adult Sink - Sensor	0.59	Not Sampled	Not Sampled	Not Required	
930	Bathroom 3	1	Washing	Adult Sink	0.62	Not Sampled	Not Sampled	Not Required	
930	Bathroom 4	137	Washing	Adult Sink	1.6	Not Sampled	Not Sampled	Not Required	
930	Exterior	136	Washing	Hose Bib	Not Detected	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	138	Washing	Hose Bib	Not Detected	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	139	Washing	Hose Bib	0.88	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	140	Washing	Hose Bib	Not Detected	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	141	Washing	Hose Bib	Not Detected	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	143	Washing	Hose Bib	Not Detected	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	144	Washing	Hose Bib	4.9	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	145	Washing	Hose Bib	0.56	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	146	Washing	Hose Bib	Not Detected	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Exterior	147	Washing	Hose Bib	0.67	Not Sampled	Not Sampled	Not Required	Used for waterplay
930	Kitchen	3	Cooking	Kitchen Sink - Sprayer	20	35	2.2	9	Most likely source of lead was the fixture. Fixture was replaced on 03/03/20 and retested on 04/03/20. The retesting result was below the screening level
930	Kitchen	5	Cooking	Kitchen Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	Kitchen	6	Cooking	Kitchen Sink	0.69	Not Sampled	Not Sampled	Not Required	
930	Kitchen	7	Cooking	Kitchen Sink	4.1	Not Sampled	Not Sampled	Not Required	
930	Kitchen	8	Drinking	Ice Machine	Not Detected	Not Sampled	Not Sampled	Not Required	-
930	Kitchen	9	Cooking	Kitchen Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	Kitchen	10	Cooking	Kitchen Sink	Not Detected	Not Sampled	Not Sampled	Not Required	
930	Kitchen	142	Cooking	Kitchen Sink	1.1	Not Sampled	Not Sampled	Not Required	
930	Laundry Room	11	Washing	Sink	11	Not Sampled	Not Sampled	Not Required	
930	Teachers Lounge	2	Drinking	Adult Sink	Not Detected	Not Sampled	Not Sampled	Not Required	Used for coffee maker
930	Custodian Room	US-1	Washing	Utility Sink	Not Sampled	Not Sampled	Not Sampled	Not Required	Cleaning only

Building	Room	Outlet		Outlet		Follow-up Lead Results (ppb)			
#	#	Map#	Category	Description	Results (ppb)	First Draw	Flush	Confirmation	Comments
930	Exterior	HB-1	Watering	Hose Bib	Not Sampled	Not Sampled	Not Sampled	Not Required	Landscaping only
930	Exterior	HB-2	Watering	Hose Bib	Not Sampled	Not Sampled	Not Sampled	Not Required	Landscaping only
930	Exterior	HB-3	Watering	Hose Bib	Not Sampled	Not Sampled	Not Sampled	Not Required	Landscaping only
930	Kitchen	4	Washing	Kitchen Sink	Not Sampled	Not Sampled	Not Sampled	Not Required	Fixture removed













