



DEPARTMENT OF THE NAVY
COMMANDER, FLEET ACTIVITIES CHINHAЕ
PSC 479 BOX 502
FPO AP 96269

DATE: 5 Jan 2017

From: Commander, Fleet Activities Chinhae
To: Parents and Staff

Subj: C. T. Joy Elementary School's Drinking Water

The safety and wellness of our youth is one of my top priorities. As Installation Commander, I would like to update you regarding the latest developments regarding our efforts to address elevated lead levels in drinking water reported on 31 August 2016 at C. T. Joy Elementary School.

We recently completed all corrective measures. New testing shows the levels at C. T. Joy Elementary School are all below the U.S. Environmental Protection Agency (EPA) recommended level of 20 ppb. Therefore, I have rescinded the water restrictions.

Recall, that on 31 August 2016, I informed you of the results of recent water testing of 14 C.T. Joy Elementary School drinking water outlets. Of these, three (3) outlets tested higher than 20 parts per billion (ppb) level for lead. This is a level recommended by the EPA to take action with additional testing and corrective measures. The Navy has adopted this recommendation as policy.

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

- We secured and clearly marked all water outlets (sink water faucets and drinking water fountains) at C.T. Joy School as out of service.
- We confirmed that the source of lead at three (3) of the faucets (women's room, boys' room, girls' room) was attributed to debris in the faucet aerators. To correct this, we removed, cleaned, and reattached aerators and resampled these locations. Resampling results confirmed that lead levels are now below EPA-recommended levels.
- We conducted follow-up sampling of 22 faucets and hand-washing sinks.
- We installed filters on the new water fountains ("water coolers").
- We replaced plumbing fixtures, including sink faucets, supply piping, and supply valve.
- We conducted additional water sampling on all outlets in the building after completion of corrective measures and results confirmed that water from these sinks and fountains is below the EPA-recommended level of 20 ppb for lead.

I have attached the complete set of test results, which include the list of sampling locations and the purpose of the water outlet (drinking fountain or sink). As described above, for those locations that exceeded the recommended level on the first test, we conducted a subsequent 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 subsequent sampling to confirm lead levels below 20 ppb. All outlets are now below the EPA-recommended level.

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

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

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

Most recent annual water quality report at your home:

CFAC Installation 2016 Drinking Water System Consumer Confidence Report is enclosed.

Drinking Water Taste, Odor, and Color:

<https://www.epa.gov/dwstandardsregulations/secondary-drinking-water-standards-guidance-nuisance-chemicals>

Parents who may have concerns about the health of their child, or child care staff who are concerned about their health should contact their health care provider, or if you are a TRICARE beneficiary, schedule an appointment at the Branch Health Clinic DSN:315- 762-5408, COMMERCIAL: 055-540-5408.

Other health questions regarding this notice can be directed to Branch Health Clinic Chinhae Preventative Medicine Authority, HM2 Malari at Marco.a.Mallari.mil@mail.mil, or Senior Medical Officer, Lt Sara at matthew.r.sara.mil@mail.mil.

Please be assured that my team and I will continue to monitor and test water quality at C.T. Joy Elementary School to ensure our drinking water complies with EPA recommendations. If you have questions or concerns, please bring them to the attention of the staff.

I am committed to the safety and health of all personnel and family members using our facilities and will keep you updated on this issue.

Sincerely,



Terry McNamara
Commander, United States Navy

Enclosures:

1. Overview of Results & Corrective Actions
2. Complete Test Results
3. Consumer Confidence Report, Drinking Water System 2016, CFAC

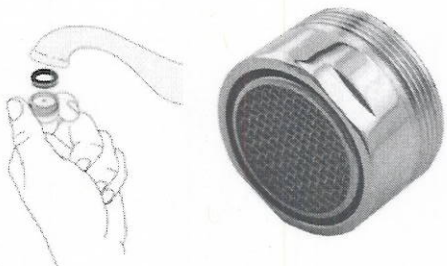
Overview of Results and Corrective Actions

Background

This summer, we undertook a number of projects to improve the facilities at C.T. Joy Elementary School. One of the projects involved installing 14 new sink faucets, drinking fountains, and supply piping and valves. On Aug. 18, we tested the drinking water for lead in accordance with Navy policy which requires tests whenever drinking water systems are modified in priority areas such as schools and day-care centers. On Aug. 29, we received the results that showed three faucets exceeded the Environmental Protection Agency's (EPA) 20 ppb (parts per billion) Screening Level for lead. This is a level recommended by the EPA to take action with additional testing and corrective measures.

Corrective Action Taken

The three faucets that exceeded 20 ppb were at bathroom hand washing sinks. The sink locations are shown in the table below. Follow-up sampling at these outlets was conducted after removing the faucet aerators. 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 and reduce splashing. However, the aerator and screen can trap debris which can accumulate lead.



After removing, cleaning, and reinstalling the faucet aerators, retesting showed that all three sinks were below the EPA-recommended level.

However, because some of the faucets and supply valves installed over the summer were not certified to meet current U.S. building codes, they were replaced with ones that do. Of the fourteen (14) new faucets and water fountains were installed over the summer, seven (7) of the faucets were replaced in December 2016. The new faucets and other plumbing components are certified to comply with U.S. SDWA, EPA recommendations, and NSF-61 standard and follow-up sampling indicates that these faucets are below the EPA-recommended level. Further corrective measures (installation of filters) were implemented at the water coolers in the lunch room, hallway, and classroom room 21, and follow-up sampling indicates that these fountains are also below the EPA-recommended level.

Summary of Test Results

The complete set of test results enclosed includes the list of sampling locations. Three (3) locations listed in the table exceeded the recommended level on the first test. After the aerators and screens were cleaned the faucets retesting results show the levels are below the EPA screening level. After additional corrective measures were completed in December 2016, additional water sampling was conducted and results confirm the water from at each outlet in the school is below the EPA-recommended level of 20 ppb for lead.

Lead in Priority Areas (LIPA) Test Results Summary (Pre and Post Corrective Action), C. T. Joy School

NO.	Facility	Sample Location	First-Draw Sample Result			
			Post Renovation	Follow-up Test	Post Corrective Action, 1st Test	Post Corrective Action, 2nd Test
			18-Aug-16	1-Sep-16	17-Dec-16	18-Dec-16
		<i>Lead Screening Level</i>	<i>20 ppb (parts per billion)</i>			
1	CT Joy	1 Fl. Lunch Room, Kitchen Sink	-	2.73	2.78	2.58
2	CT Joy	1 Fl. Boys' Rm, Right Bathroom Sink	16.30	13.30	N.D.	N.D.
3	CT Joy	1 Fl. Girls' Rm, Right Bathroom Sink	16.00	11.40	N.D.	N.D.
4	CT Joy	Class Room 2, Sink	-	12.10	N.D.	N.D.
5	CT Joy	Class Room 1, Sink	-	N.D.	N.D.	N.D.
6	CT Joy	Class Room 4, Sink	-	11.00	4.55	4.89
7	CT Joy	Class Room 3, Sink	-	N.D.	N.D.	N.D.
8	CT Joy	1 Fl. Men's Rm, Bathroom Sink	15.00	13.3	N.D.	N.D.
9	CT Joy	1 Fl. Women's Rm, Bathroom Sink	30.70	11.00	N.D.	N.D.
10	CT Joy	Class Room 5, Sink	-	N.D.	N.D.	N.D.
11	CT Joy	Teacher's Rm, Kitchen Sink	-	N.D.	N.D.	N.D.
12	CT Joy	Science Lab, Kitchen Sink	-	N.D.	N.D.	N.D.
13	CT Joy	Science Lab, Lab Sink	-	2.35	N.D.	N.D.
14	CT Joy	Science Lab, Lab Sink	-	N.D.	N.D.	N.D.
15	CT Joy	Science Lab, Lab Sink	-	5.66	N.D.	N.D.
16	CT Joy	Science Lab, Lab Sink	-	2.39	2.18	2.15
17	CT Joy	Science Lab, Lab Sink	-	5.53	N.D.	N.D.
18	CT Joy	2 Fl. Room 21, Water Cooler	7.13	8.87	N.D.	N.D.
19	CT Joy	1 Fl. Boys' Rm, Left Bathroom Sink	68.80	6.69	2.22	2.18
20	CT Joy	1 Fl. Boys' Rm, Utility Sink	6.14	7.21	3.78	3.01
21	CT Joy	1 Fl. Girls' Rm, Utility Sink	3.00	6.65	2.31	2.50
22	CT Joy	Class Room 1, Bubblers	-	2.14	N.D.	N.D.
23	CT Joy	Class Room 3, Bubblers	-	N.D.	N.D.	N.D.
24	CT Joy	Class Room 5, Bubblers	-	2.93	N.D.	N.D.
25	CT Joy	Class Room 2, Bubblers	-	N.D.	N.D.	N.D.
26	CT Joy	Class Room 4, Bubblers	-	N.D.	N.D.	N.D.
27	CT Joy	1 Fl. Girls' Rm, Left Bathroom Sink	21.00	14.1	N.D.	N.D.
28	CT Joy	1 Fl. Lunch Rm, High Water Cooler	2.14	3.04	N.D.	N.D.
29	CT Joy	1 Fl. Lunch Rm, Low Water Cooler	3.28	4.24	N.D.	N.D.
30	CT Joy	2 Fl. Classroom 21, Sink	9.90	5.51	N.D.	N.D.
31	CT Joy	1 Fl. Hallway, High Water Cooler	2.31	2.41	N.D.	N.D.
32	CT Joy	1 Fl. Hallway, Low Water Cooler	4.14	2.35	N.D.	N.D.

Note:

1. N.D.: Not Detected, <2 ppb (Parts Per Billion)
2. Sample locations in bold indicate where faucets were replaced and filters were installed on water coolers as corrective action.