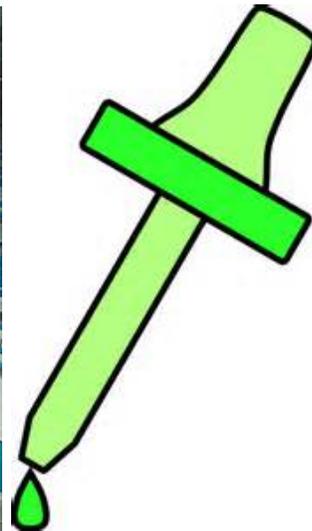


**Overview of Testing Results for Lead in Drinking Water  
and Corrective Actions for  
NSA Hampton Roads, Portsmouth Annex Child Wait Center/CDC (Building 249)**

The Navy is committed to maintaining safe drinking water on its installations. 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 introduced to drinking water through the pipes, fittings, solder, and fixtures inside a building, the EPA recommends, but does not mandate, that we test the lead content of drinking water in priority areas such as youth centers (YCs), child development group homes (CDGHs) and child development centers (CDCs).

Navy environmental personnel conducted lead testing at the Portsmouth Annex Child Wait Center/CDC in accordance with Navy and EPA guidelines. Samples from various locations in the CDC were sent to a state-certified laboratory for analysis.

At the Portsmouth Annex Child Wait Center/CDC, outlets used for drinking and cooking, as well as outlets used for hand washing were tested. Out of 28 samples collected, one water outlet initially tested above the EPA recommended level for lead in drinking water in schools and childcare centers of 20 parts per billion (ppb). One part per billion is equal to one drop of water in an Olympic-size swimming pool.



The outlet that exceeded the EPA recommended level of 20 ppb was at a kitchen sink located in Room 186, which tested at 22 ppb. This outlet was occasionally used for food preparation and dishwashing. Follow-up sampling at this outlet was conducted after removing the faucet aerator; retesting showed that the sink faucet in Room 186 was below the EPA-recommended level. 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 the faucet aerators, retesting showed that the sink faucet in Room 186 was below the EPA-recommended level.**

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

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

A floor plan of the Portsmouth Annex Child Wait Center/CDC has also been included to show the location for the fixture that exceeded 20 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). 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 level of 20 ppb the *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 CDC opened and before any water was used. The *Initial Sampling Results* also indicate whether resampling is required and the date that fixtures greater than 20 ppb were secured. Outlets that exceeded 20 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 before retesting:

- If the lead concentration of the 30 second flush sample resulted in lower than 20 ppb lead, the aerator was the source of lead and the outlet can be used for drinking if the aerator is cleaned or replaced. ***The sink in Room 186 fits in this category.***
- If the lead concentration of the resampled first draw (but not the follow up 30 second flush) was greater than 20 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 30 second flush sample was greater than 20 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 *Corrective Actions* column describes actions that were taken to remediate the source of lead. In the event that fixtures or upstream piping are replaced, there are columns for sampling data that confirms that the corrective actions were successful in reducing lead below 20 ppb.

To learn more about lead in drinking water schools and day care centers visit this EPA website at: [http://water.epa.gov/drink/info/lead/schools\\_index.cfm](http://water.epa.gov/drink/info/lead/schools_index.cfm).

To learn more about your home's public water supplier, see their annual water quality report: Portsmouth: <http://www.portsmouthva.gov/publicutil/waterqualityreport.aspx>

Navy Water Quality Reports:

[http://www.cnmc.navy.mil/regions/cnrma/om/environmental\\_support/drinking\\_water.html](http://www.cnmc.navy.mil/regions/cnrma/om/environmental_support/drinking_water.html)

To answer any questions you may have on the sampling program contact the NSA Hampton Roads Public Affairs Officer at **757-836-1484**. If you have any health questions or concerns, we encourage you to contact your health care provider or, if you are a TRICARE beneficiary, contact the Mid-Atlantic Nurse Advice Line (1-800-TRICARE, press option 1) or use the Mid-Atlantic Appointment Center at 1-866-645-4584 to schedule an appointment with your primary care provider.

Priority Areas Lead Testing and Corrective Actions (September 2014)  
NSA Hampton Roads, Portsmouth Annex, Child Wait Center  
Building 249

Table 1. Summary of Results

SAMPLING LOCATION DESCRIPTION			INITIAL SAMPLING RESULTS		RE-SAMPLING RESULTS				CORRECTIVE ACTIONS	POST REMEDIATION SAMPLING RESULTS		
CATEGORY Water Intended For:	SAMPLE ID No.	Outlet Description	First Draw (ppb)	Retest required?	Date Fixture Secured? (See Note 1)	Recommended Level = 20ppb				Description	Recommended Level = 20ppb	
						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)	First Draw (ppb)		Follow up Flush - Collected 30 seconds after First Draw Sampling (ppb)	First Draw (ppb)
SAMPLING DATE			9/5/2014			N/A	9/16/2014	9/16/2014				
RESULTS DATE			9/15/2014			N/A	9/19/2014	9/19/2014				
DRINKING	1	Water fountain (cooler)	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DRINKING	2	Water fountain (cooler)	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DRINKING	4	Room 175 kitchen sink for food prep	2	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DRINKING	9	Room 179 water fountain from combination sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DRINKING	13	Room 181 kitchen sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DRINKING	19	Room 185 water fountain from combination sink	1	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DRINKING	23	Room 187 water fountain from combination sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DRINKING	32	Room 176 water fountain from combination sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
COOKING	25	Room 186 kitchen sink for dishwashing, food prep	1	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
COOKING	26	Room 186 kitchen sink for dishwashing, food prep	3	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
COOKING	27	Room 186 kitchen sink for dishwashing, food prep	22	YES	9/12/2014	N/A	10	2	Results were below recommended level after removal of aerator. Additional corrective actions are not required.	N/A	N/A	
COOKING	28	Room 186 kitchen sink for dishwashing, food prep	19	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	3	Restroom A hand washing sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	5	Room 175 hand washing sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	8	Room 179 hand washing outlet from combination sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	10	Room 179 hand washing sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	11	Room 179 hand washing sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	12	Restroom B hand washing sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	16	Room 185 hand washing sink	3	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	17	Room 185 hand washing sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	18	Room 185 hand washing outlet from combination sink	3	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	20 (sampled 9/10/14)	Room 187 hand washing sink	3	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	21	Room 187 hand washing sink	6	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	22	Room 187 hand washing outlet from combination sink	3	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	29	Room 186 hand washing sink	5	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	30	Room 176 hand washing sink	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING/TEETHBRUSHING	31	Room 176 hand washing and teethbrushing outlet	non-detect	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WASHING	33	Room 176 hand washing sink	1	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

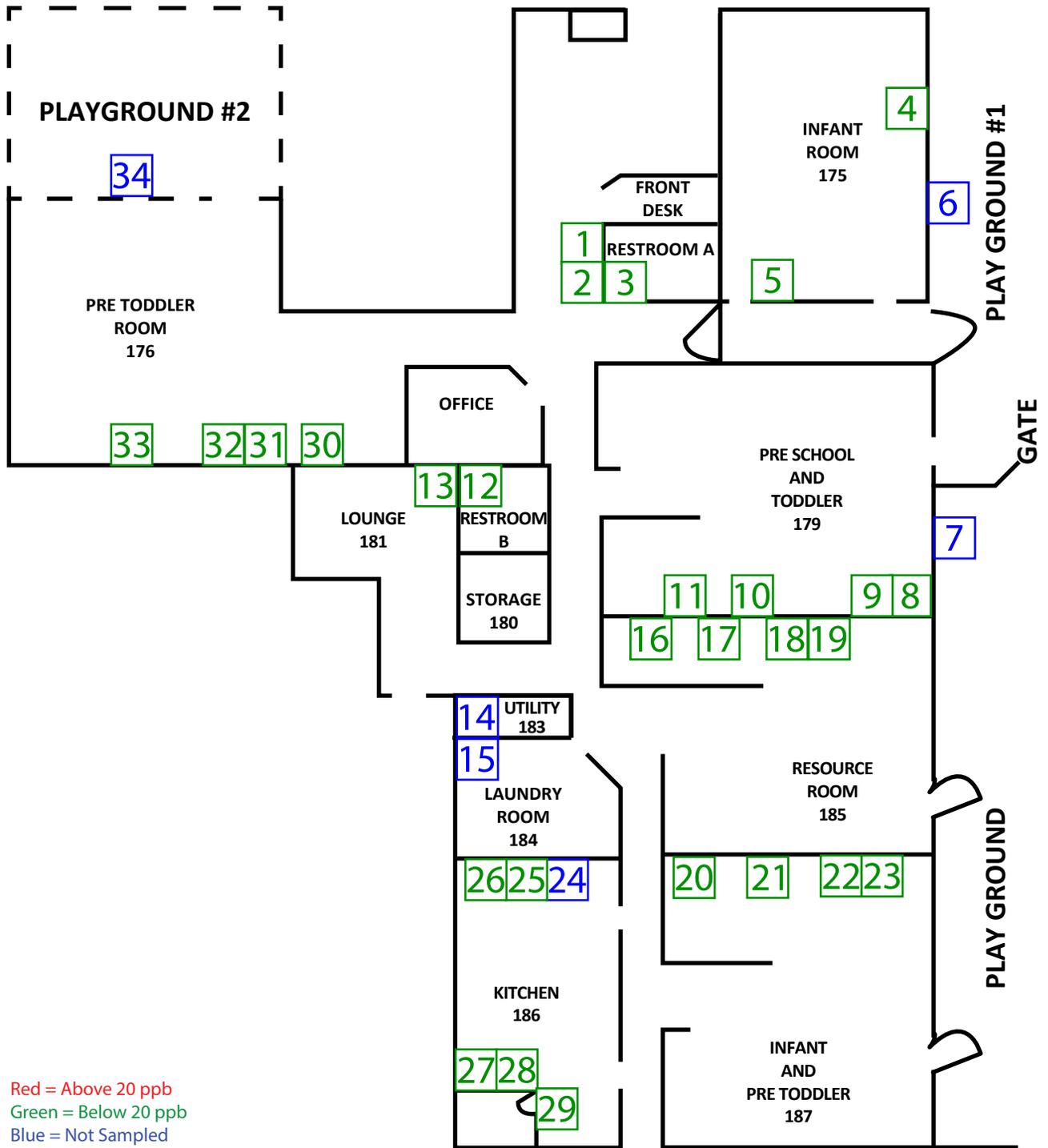
Notes:

<sup>1</sup> Affected outlets were immediately secured after receiving verbal communication from the lab on results exceeding the recommended level of 20ppb.

Table 2. Summary Statistics

CATEGORY	INITIAL SAMPLING RESULTS		RE-SAMPLING RESULTS		POST REMEDIATION RESULTS
	First Draw	Water Fountain Follow up Flush Sample - Collected day before First Draw Sampling	Recommended Level = 20ppb		
			First Draw (ppb)	Follow up Flush - Collected 30 seconds after First Draw Sampling	First Draw
Total Drinking	8	0	0	0	0
Total Drinking > 20 ppb	0	0	0	0	0
Total Cooking	4	0	1	1	0
Total Cooking > 20 ppb	1	0	0	0	0
Total Washing/Brushing	16	0	0	0	0
Total Washing/Brushing > 20 ppb	0	0	0	0	0
Total Samples	28	0	1	1	0
Total Samples > 20 ppb	1	0	0	0	0

FRONT ENTRANCE



Red = Above 20 ppb  
Green = Below 20 ppb  
Blue = Not Sampled

No.	Outlet ID	Location Description	Sampled?	Exceeded?
1	Water fountain (cooler)	Hall	Yes	No
2	Water fountain (cooler)	Hall	Yes	No
3	High hand washing faucet	Restroom A	Yes	No
4	Kitchen sink with foot pump for food prep	Room 175 (Infant Room)	Yes	No
5	High hand washing faucet with foot pump	Room 175 (Infant Room)	Yes	No
6	Hose outlet – not for drinking	Outside	No	N/A
7	Water fountain (bubbler)	Outside (Playground #1)	No (removed prior to sampling)	N/A
8	Low hand washing faucet from combination sink	Room 179 (Preschool and Toddler)	Yes	No
9	Water fountain outlet from combination sink	Room 179 (Preschool and Toddler)	Yes	No
10	High hand washing faucet	Room 179 (Preschool and Toddler)	Yes	No
11	Low hand washing faucet	Room 179 (Preschool and Toddler)	Yes	No
12	High hand washing faucet	Restroom B	Yes	No
13	Kitchen sink	Room 181 (Staff Lounge)	Yes	No
14	Utility sink – not for drinking	Room 183 (Utility Room)	No	N/A
15	Utility sink – not for drinking	Room 184 (Laundry Room)	No	N/A
16	Low hand washing faucet	Room 185 (Resource Room)	Yes	No
17	High hand washing faucet	Room 185 (Resource Room)	Yes	No
18	Low hand washing faucet from combination sink	Room 185 (Resource Room)	Yes	No
19	Water fountain outlet from combination sink	Room 185 (Resource Room)	Yes	No
20	Low hand washing faucet	Room 187 (Infant and Pre-toddler)	Yes	No
21	High hand washing faucet	Room 187 (Infant and Pre-toddler)	Yes	No
22	Low hand washing faucet from combination sink	Room 187 (Infant and Pre-toddler)	Yes	No
23	Water fountain outlet from combination sink	Room 187 (Infant and Pre-toddler)	Yes	No
24	Dishwasher sprayer – not for drinking	Room 186 (Kitchen)	No	N/A
25	Kitchen sink for dishwashing, food prep	Room 186 (Kitchen)	Yes	No
26	Kitchen sink for dishwashing, food prep	Room 186 (Kitchen)	Yes	No
27	Kitchen sink for dishwashing, food prep	Room 186 (Kitchen)	Yes	Results were below recommended level after removal of aerator.
28	Kitchen sink for dishwashing, food prep	Room 186 (Kitchen)	Yes	No
29	High hand washing faucet	Room 186 (Kitchen)	Yes	No
30	Low hand washing faucet	Room 176 (Pre-toddler)	Yes	No
31	Low hand washing and teeth brushing outlet from combination sink	Room 176 (Pre-toddler)	Yes	No
32	Water fountain outlet from combination sink	Room 176 (Pre-toddler)	Yes	No
33	Low hand washing faucet	Room 176 (Pre-toddler)	Yes	No
34	Water fountain (bubbler)	Outside (Playground #2)	No (removed prior to sampling)	N/A

	# Sample ID	Location Description
	Outlet numbers pertaining to the floor plan.	

Red = Above 20 ppb  
Green = Below 20 ppb  
Blue = Not Sampled