

Special Announcement



National Aeronautics and
Space Administration

Goddard Space Flight Center
Wallops Flight Facility
Wallops Island, Virginia 23337

Date: July 19, 2019

Subject: IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Consumer Notice of Tap Water Results Wallops Flight Facility Main Base

NASA Wallops Flight Facility (WFF) operates a water system that provides drinking water at the WFF main base and WFF mainland/island areas. To help ensure that drinking water meets state and federal standards, WFF periodically samples and analyzes the water for bacteria and metals concentrations. WFF recently completed semiannual monitoring for lead and copper in drinking water, as defined in the Virginia Regulations. All samples were collected from unfiltered taps. The results of this round of testing are as follows:

Drinking Water Lead and Copper Results			
Sample Location	Sample Date	Copper (mg/L)	Lead (mg/L)
A-1	5/11/2019	0.0724	<0.002
A-41	5/11/2019	0.199	0.00336
F-10	5/11/2019	0.202	<0.002
E-2	5/11/2019	0.0666	<0.002
Q-29	5/29/2019	0.188	<0.002
CBFS	5/11/2019	0.368	<0.002
N-159	5/11/2019	0.16	0.00667
N-162	5/11/2019	0.0384	0.0133
F-20	5/11/2019	0.106	<0.002
F-16	5/11/2019	0.346	0.0075
E-104	5/11/2019	0.034	<0.002
D-1	5/11/2019	0.197	0.00227
F-3	5/11/2019	0.166	0.00321
F-160	5/11/2019	0.197	0.00738
E-107	5/11/2019	0.0353	<0.002
F-1	5/11/2019	0.244	<0.002
M-15	5/11/2019	0.0522	<0.002
R-20	5/11/2019	0.181	0.0156
J-20	5/11/2019	0.173	<0.002
NOAA	5/11/2019	0.254	0.00543

- The < symbol indicates concentrations were not detected above the indicated laboratory detection limit.
- Shaded data represent the 90th percentile results from the monitoring period.
- Results in **BOLD** are above the regulatory action level.

What Does This Mean?

Under the authority of the Safe Drinking Water Act, the Environmental Protection Agency (EPA) set action levels in drinking water for copper and lead at 1.3 milligrams per liter (mg/L) and 0.015 mg/L, respectively. The action level is the concentration which, if exceeded, triggers additional sampling, treatment, or other requirements. WFF must ensure that tap water does not exceed action levels at the 90th percentile concentration. Since twenty samples were collected, the 90th percentile value is the third highest sample result (shown shaded in the table above). Individual sample concentrations that exceeded the action level are shown in bold in the table above.

The 90th percentile copper concentration is 0.254 mg/L, which is below the copper action level of 1.3 mg/L. The 90th percentile lead concentration is 0.0075 mg/L, which is below the lead action level of 0.015 mg/L.

The EPA also set Maximum Contaminant Level Goals (MCLG) for copper and lead. These are the maximum concentrations in drinking water for which there are no known or expected health risks. MCLGs allow for a margin of safety. Because lead may pose serious health risks, the EPA set the lead MCLG at zero. The MCLG for copper is 1.3 milligram per liter (same as the action level).

Lead in drinking water may be due to conditions unique to a building and plumbing system, such as the presence of lead solder, brass faucets, fittings, or valves that contain lead. WFF waterworks strives to moderate the corrosiveness of the drinking water since corrosive water can leach metals from plumbing materials. WFF also maintains activated carbon filters on water fountains and kitchen sinks. After filtration at the tap, WFF's water has proven to be of the same quality as bottled water. Operations and maintenance personnel routinely flush water mains and interior building taps to further reduce metals in the water.

You can call the "HELP" desk (x4357) to request that the activated carbon filters in your area be examined and replaced as necessary.

What Are the Health Effects of Lead?

According to EPA and Virginia Department of Health (VDH), Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of the body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy the child receives lead from the mother's bones, which may affect brain development.

References: www.epa.gov/lead or www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#reducehome.

What Are the Sources of Lead?

According to EPA and VDH, lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. It can be found in lead-based paint, air, soil, household dust, food, some types of pottery, and drinking water. EPA estimates that 10 to 20 percent of a person's potential exposure to lead over a lifetime may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water. Lead is rarely found in natural sources of water such as rivers, lakes, wells, or springs.

References: www.epa.gov/lead or www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#reducehome.

What Can I Do to Reduce Exposure to Lead in Drinking Water?

According to EPA and VDH, lead may work its way into drinking water after the water enters the distribution system and is on its way to consumers' taps. This usually happens through the corrosion of materials containing lead in household plumbing. These materials include brass faucets, lead solder on copper pipes, lead pipes, or lead service lines connecting the water main to the inside plumbing. Lead pipes are no longer installed for service lines or in household plumbing, and lead solder has been outlawed in Virginia since 1985.

References: www.epa.gov/lead or www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#reducehome.

There are several steps to take to reduce your exposure to lead in drinking water. These include:

- 1. Run your water to flush out lead.** If water hasn't been used for several hours, allow the water to run at the tap for 30 seconds up to 2 minutes before using it for drinking or cooking. This action flushes the lead-containing water from the pipes. The water you run from drinking water taps does not have to be wasted. You can use this water for cleaning purposes or for watering plants. You may want to keep a container of drinking water in your refrigerator, so you don't have to run water every time need it.
- 2. Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap, as lead dissolves more easily in hot water. Do not use water from the hot water tap to make baby food or formula.
- 3. Do not boil water to remove lead.** Boiling water will not reduce lead.
- 4. Look for alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved for reducing lead, or contact the National Sanitation Foundation at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. If you choose to install a lead removal filter, be sure to maintain and replace the filter device in accordance with the manufacturer's instructions.
- 5. Get your child tested.** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.
- 6. Identify any plumbing fixtures containing lead.** Brass faucets, fittings, and valves manufactured before January 4, 2014, may contribute lead to drinking water, including those advertised as "lead free." Under current law, "lead free" means no more than 0.2 percent lead in solder and flux, and 0.25 percent lead for pipe, pipe fittings, and components. Visit the National Sanitation Foundation Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

For More Information

Call NASAWFF's Environmental Office at 757-824-1987. For more information on reducing lead exposure around your home, and the health effects of lead, visit EPA's web site at www.epa.gov/lead, www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#reducehome, call the National Lead Information Center at 800-424-LEAD, or contact your personal health care provider.



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Date

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