

Special Announcement



National Aeronautics and
Space Administration

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

Date: September 13, 2023

Subject: DRINKING WATER LEAD AND COPPER RESULTS

Consumer Notice of 2023 Annual Tap Water Results (taken July – August 2023) Wallops Flight Facility, Main Base

NASA Wallops Flight Facility (WFF) operates two drinking water systems that provide drinking water throughout the Main Base and Wallops Mainland/Island locations. This announcement is to report annual lead and copper results from samples collected prior to filtration at ten WFF facilities. The reported results are presented in the table below. The regulatory Action Level for lead is 15 parts per billion or 0.015 milligrams per liter (mg/L) and the regulatory Action Level for copper is 1.3 mg/L. The sampling results show WFF's drinking water is fully compliant with EPA and Virginia Department of Health safe drinking water standards (see Definitions in the attached Fact Sheet regarding the 90th percentile standard).

2023 Annual Main Base Tap Water Lead and Copper Results			
Sample Location	Sample Date	Copper (mg/L)	Lead (mg/L)
B-129	7/27/2023	0.0249	0.00224
E-002	7/27/2023	0.183	<0.002
E-104	7/27/2023	<0.020	<0.002
F-003	7/27/2023	0.255	0.00640
F-005	7/21/2023	0.126	<0.002
G-026 (CBFS Cafeteria)	7/27/2023	<0.020	0.0241*
G-036 (CBFS Dorms)	7/27/2023	0.0920	0.00281
G-044 (CBFS Housing)	7/27/2023	0.0956	0.00252
J-020 (Visitor Center)	8/23/2023	0.013	<0.001
R-020	7/27/2023	0.117	0.00440

The < symbol indicates concentrations below the detection capability of the laboratory analytical method. Results in **BOLD** represent the 90th percentile results from the monitoring period.

Shaded results are above the action levels (0.015 mg/L for lead and 1.3 mg/L for copper).

* According to CBFS personnel, the sink utilized for this sample was not in use. Water to the sink has been secured.

Some individual facilities may have lead concentrations above the regulatory Action Level while the 90th percentile value for the entire waterworks is below the Action Level. These individual site lead levels may be due to conditions unique to the individual facility, such as the presence of lead solder or brass faucets, fittings, and valves that may contain lead. The WFF waterworks strives to keep the corrosivity of the water as low as possible (since corrosive water can cause lead to leach from plumbing materials that contain lead). Additionally, there are actions you can take to reduce your exposure. You are strongly urged to review the enclosed Consumer Notice and take the steps listed to reduce your exposure to lead in drinking water.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the Action Level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the Action Level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

For More Information

Email julie.r.shane@nasa.gov or go to <https://code200-external.gsfc.nasa.gov/250-WFF/program-areas-drinking-water>.

For more information on reducing lead exposure around your home/building and the health effects of lead:

1. Visit EPA's website at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>
2. Visit VDH's website at <https://www.vdh.virginia.gov/drinking-water/lead-and-copper-information/>
3. Contact your health care provider;
4. Contact the National Lead Information Center at 800-424-LEAD

This notice is brought to you by NASA – Wallops Flight Facility. State Water System ID# 3001500.

Distribution: 100 200 400 500 600 700 800 Contractors Tenants

Enclosure: VDH Residential Consumer Notice

Virginia Department of Health Residential Consumer Notice

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

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. Lead is rarely found in natural sources of water such as rivers, lakes, wells or springs.

Health Effects of Lead

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 your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain 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.

Steps You Can Take to Reduce Your Exposure to Lead in Your Water

Lead may work its way into drinking water after the water entered 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. If you live in a building in which the inside plumbing contains lead-based materials, there are several steps you can take to reduce your exposure to lead in drinking water.

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 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 you need it.
2. **Use water from the cold water tap for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap; lead dissolves more easily in hot water. Do not use water from the hot water tap to make baby formula.
3. **Do not boil water to remove lead.** Boiling water will not reduce or remove lead.
4. **Consider installing a filter.** You may want to consider installing a water filter. Ensure that the filter is approved to reduce lead or contact the National Sanitation Foundation at 800-NSF- 8010 or www.nsf.org for information on performance standards for these types of water filters. If you choose to install a lead removal filter, be sure to maintain and replace the filter in accordance with the manufacturer's instructions to protect water quality.
5. **Get your child tested.** Contact your local health department or healthcare provider to find out how you can get your child's blood tested for lead if you are concerned about exposure.
6. **Identify and replace any plumbing fixtures that contain 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% lead in solder and flux, and 0.25% 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.

Definitions

Under the authority of the Safe Drinking Water Act, the Environmental Protection Agency (EPA) set the Action Level for lead in drinking water at 15 ppb (or 0.015 mg/L). This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the locations sampled (this is referred to as the 90th percentile value). The Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Because lead may pose serious health risks, the EPA also set a Maximum Contaminant Level Goal (MCLG) for lead of zero. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.