

**Consumer Notice of Tap Water Results
Non Transient Non Community Water Systems
(Wallops Flight Facility Main Base)**

NASA Wallops Flight Facility (Main Base) operates a water system that provides drinking water at this location and throughout Wallops Island, Mainland and Main Base. WFF ensures that the drinking water provided meets state and federal standards. That water is sampled and analyzed for bacteria and metal concentrations periodically. Wallops Analytical Chemistry Laboratory personnel recently collected drinking water samples to measure the amount of copper and lead present. The results of this testing are as follows:

Sample Location	Sample Date	Copper (mg/l)
E104	6/22/2010	<0.020
F160	6/22/2010	<0.020
E107	6/22/2010	<0.020
F1	6/22/2010	0.0216
R20	6/23/2010	0.0291
N162	6/23/2010	0.0327
D1	6/22/2010	0.0371
A1	6/22/2010	0.0418
F16	6/22/2010	0.046
M15	6/24/2010	0.0493
F20	6/22/2010	0.0494
Q29	6/23/2010	0.0523
B13	6/23/2010	0.0588
NOAA	6/23/2010	0.903
F18	6/24/2010	0.104
E2	6/22/2010	0.119
F3	6/22/2010	0.125
F10	6/22/2010	0.133
F4	6/22/2010	0.155
F5	6/22/2010	0.215

Sample Location	Sample Date	Lead (mg/l)
E104	6/22/2010	<0.002
F160	6/22/2010	<0.002
E107	6/22/2010	<0.002
F1	6/22/2010	<0.002
R20	6/23/2010	<0.002
N162	6/23/2010	<0.002
D1	6/22/2010	<0.002
F16	6/22/2010	<0.002
F20	6/22/2010	<0.002
Q29	6/23/2010	<0.002
B13	6/23/2010	<0.002
F18	6/24/2010	<0.002
E2	6/22/2010	<0.002
F10	6/22/2010	<0.002
F4	6/22/2010	<0.002
F5	6/22/2010	<0.002
A1	6/22/2010	0.002
F3	6/22/2010	0.003
M15	6/24/2010	0.004
NOAA	6/23/2010	0.0231

Copper and Lead Concentrations are in milligrams per liter (mg/l)

The < symbol indicates that the concentration was below the detection capability of the analytical instrument.

What Does This Mean?

Under the authority of the Safe Drinking Water Act, the Environmental Protection Agency (EPA) set the action level for copper in drinking water at 1.3 mg/l and the action level for lead is 0.015 mg/l. The action level is the concentration of a contaminant which, if exceeded, triggers treatment, additional sampling, or other requirements. WFF must ensure that water from the customer's tap does not exceed the action level at the 90th percentile sample. For example, if ten samples are obtained the 90th percentile sample is the 9th sample. If less than 10 samples are obtained the sample representing 90% is used (rounding up if a fraction). If only 5 samples are obtained, the 4th and 5th sample concentrations are averaged. For this sampling event the action level is represented by the 18th samples (in bold) which are below the action levels.

The EPA set Maximum Contaminant Level Goals (MCLG). These are the maximum contaminant level in drinking water in which there is no known or expected risk to health. 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 mg/l (same as the action level).

What Are The Health Effects of Lead?

When people come in contact with lead, it may enter their bodies and accumulate over time, resulting in damage to the brain, kidneys, nervous system and red blood cells. The greatest absorption of lead occurs in those undergoing fast growth; therefore, the most significant risk of lead exposure is to fetuses, infants and children. Lead in water can be a special problem for infants, whose diets may be mostly liquids, such as baby formulas or concentrated juices that are mixed with tap water. Smaller bodies can absorb lead more rapidly than bigger ones, so amounts of lead that won't hurt an adult can be very harmful to a child. Scientists have linked the effects of high lead levels in the blood with lowered IQ in children. During pregnancy, the fetus may receive lead from the mother's bones, which may affect brain development. Adults who consume elevated concentrations of lead over many years may develop kidney problems or high blood pressure.

What Are The Sources of Lead?

Typical sources of lead exposure for most children include deteriorating lead-based paints (including toys), lead-contaminated dusts, and lead-contaminated soils.

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

Lead may work its way into drinking water 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.

There are several steps you can take to reduce possible exposures to lead in drinking water. These include:

- 1. Run water for 15-30 seconds to flush out lead.** If water hasn't been used for several hours, lead may leach from sources into the system. Allow the water to run until it becomes cold before using it for drinking or cooking.
- 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 into hot water. Do not use water from the hot water tap to make baby formula. Do not boil water to remove lead. Boiling water will not reduce lead.
- 3. Look for alternate sources or treatment of water.** You may consider purchasing bottled water, or using a water filter. Read the package to be sure 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 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 to protect water quality.
- 4. Get tested.** Contact your local health department or healthcare provider to find out how you or your child can get your blood lead level tested if you are concerned about exposure.
- 5. Evaluate your plumbing fixtures for lead.** New brass faucets, fittings, and valves, including those advertised as "lead-free" may still contribute small amounts of lead to drinking water. The law currently allows some fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." Visit the National Sanitation Foundation Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

6. What we do here at NASA Wallops Flight Facility. The WFF Facilities Management Branch is continuing the operation of corrosion control systems to further reduce the pre-filter lead levels in WFF's drinking water. The WFF Operations and Maintenance personnel are routinely flushing water mains and interior building taps to better distribute the corrosion inhibitor and to optimize the systems' lead and copper reducing potential. Additionally, activated carbon filters are installed and maintained on water fountains and kitchen sinks. A filter maintenance program is in operation to ensure the filters are effective. After filtration, WFF's water has proven to be of the same quality as bottled water. If your water filter is past the expiration date, call the Help Desk (ex 4357) to arrange a replacement.

For More Information

Call NASA WFF's Environmental Office Water Programs Office at 757-824-1327. 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, call the National Lead Information Center at 800-424-LEAD, or contact your personal health care provider.