

Naval Support Facility Dahlgren

2013 Consumer Confidence Report (CCR)

Naval Support Activity South Potomac is pleased to present you with the 2013 Naval Support Facility (NSF) Dahlgren annual water quality report, covering testing performed between January 1 and December 31, 2013, as required by the Safe Drinking Water Act (SDWA). **Testing indicates your drinking water supply was in full compliance with federal and state Safe Drinking Water Act standards during 2013.** We are committed to providing high-quality, safe, and reliable drinking water service to you every day, while also working hard to protect and preserve our environment. This report is a snapshot of last year's water quality and is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The 2013 drinking water monitoring schedule, established by the Virginia Department of Health, included collection of routine monthly bacteria samples, annual nitrate/nitrite samples, triennial lead and copper samples, and monitoring chlorine disinfectant residual.

Special Precautions and Health Information:

(Note: This statement is required by the Virginia Department of Health Waterworks Regulations and 1998 Environmental Protection Agency (EPA) Consumer Confidence Report Rule.)

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Substances Expected to be in Drinking Water:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: (i) microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (ii) inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; (iii) pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; (iv) organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and (v) radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Water Source Information:

Potable water produced by the NSF Dahlgren drinking water system is comprised entirely of groundwater. No surface water enters the drinking water system. Water is pumped from 600 to 800 feet below ground from the Potomac Aquifer, which is a deep geologic feature that primarily recharges with the slow downward percolation

of rainwater. This rate is so slow, that if rain fell today, it would take roughly a thousand years to reach the Aquifer.

A system of three water wells, all located on the southern portion of NSF Dahlgren, is used to bring groundwater to the surface where it is treated by disinfection, pressurized or sent to water towers for storage, and distributed to NSF Dahlgren consumers. Disinfection of the groundwater involves the addition of chlorine to kill any dangerous bacteria and microorganisms that may be in the water and it continues to disinfect water as it travels through pipes. Disinfection is considered to be one of the major public health advances of the 20th century. If you object to the chlorine taste of your tap water, try placing the water in an uncovered pitcher in the refrigerator overnight. This will reduce the chlorine taste.

Source Water Assessment and its Availability:

The Virginia Department of Health conducted a source water assessment of the NSF Dahlgren drinking water system in 2002 and determined it to be of high susceptibility to contamination by using State developed criteria in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination within the five years prior. The report is available by contacting the Water Media Manager, Amanda Stella (540-653-1683), in the NSF Dahlgren Environmental Office.

Note to Users of Infrequently Used Facilities:

Some of our facilities have low or infrequent water use. To ensure that drinking water in these low-use facilities maintain proper chlorination, the Public Works Water Utilities operators regularly exercise the fire hydrants to keep chlorination levels elevated and fresh water moving through the system. First thing in the morning or after long periods without use, it may be desirable to improve the water taste by allowing fixtures to flow for a few minutes before water use. If you require assistance regarding infrequently used facilities, please call NSF Dahlgren Public Works Department, Utilities and Energy Management Branch, at (540) 653-8660 or (540) 653-1306.

Note to Sodium Sensitive Groups:

The drinking water at NSF Dahlgren contains levels of sodium that measured between 79.7 and 104.0 milligrams per liter (mg/L) in 2011. Sodium will be sampled again in 2014 in accordance with our State established monitoring requirements. U.S. Department of Agriculture and the Department of Health and Human Services jointly publish the Dietary Guidelines for Americans every five years. The latest version of the Dietary Guidelines is from 2010, and recommends individuals reduce daily sodium intake to less than 2,300 milligrams (mg), and further reduce intake to 1,500 mg among persons who are 51 and older and those of any age who are African American or have hypertension, diabetes, or chronic kidney disease.

Additional Information for Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Naval Support Facility Dahlgren is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. New brass faucets, fittings, and valves, including those advertised as “lead-free,” may contribute lead to drinking water. The law currently allows end-use fixtures, such as faucets, with less than 0.25% 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.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Use water only from the cold-water tap for drinking, cooking, and especially making baby formula, as hot water may contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1(800) 426-4791 or at <http://www.epa.gov/safewater/lead>. NSF Dahlgren most recently

conducted triennial lead and copper testing in August of 2013; none of the 20 test sites exceeded the 15 parts per billion (ppb) EPA maximum contaminant level (MCL) for lead, nor the 1.3 parts per million (ppm) MCL for copper.

Home Filtration or Treatment Devices:

While the drinking water at NSF Dahlgren is safe to drink and was in compliance with federal and state regulations during 2013, some individuals prefer to use an additional at-home or office filtration or treatment device. If you decide to use a filtration or treatment device, we strongly encourage you to contact the National Sanitation Foundation (NSF) for a list of approved devices. If you purchase a treatment device for private home use we also strongly recommend that it is maintained and that active maintenance is provided according to the manufacturer's instructions. Failure to maintain the equipment properly may create the potential for contamination.

Water Conservation Tips:

There are many low-cost and no-cost ways to conserve water. Small changes can make a big difference. For example:

- Shut off water while brushing your teeth, washing your hair and shaving.
- Run your clothes washer and dishwasher only when they are full.
- Use a broom instead of a hose to clean your driveway and sidewalk and save water every time.
- When washing dishes by hand, don't let the water run while rinsing. Fill one sink with wash water and the other with rinse water.
- Don't use running water to thaw food. Defrost food in the refrigerator for water efficiency and food safety
- Collect water from your roof to water your garden.
- Fix leaky toilets and faucets –Check for a leak by placing a few drops of food coloring in the tank and see if it seeps into the toilet bowl without flushing. If so, you have a leak.

Water Quality Information

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	NSF Dahlgren's Water	NSF Dahlgren's Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfectant By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (ppb)	NA	60	1.3	1	1.3	2011	No	By-product of drinking water disinfection.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	NSF Dahlen's Water	NSF Dahlen's Range		Sample Date	Violation	Typical Source
				Low	High			
Chlorine (as Cl ₂) (ppm)	4	4	0.75	0.31	0.75	2013	No	Water additive used to control microbes.
TTHMs [Total Trihalomethanes] (ppb)	NA	80	9.7	7.7	9.7	2011	No	By-product of drinking water disinfection.
Inorganic Contaminants								
Fluoride (ppm)	4	4	1.1	1	1.1	2011	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen] (ppm)	10	10	0.19	0.07	0.19	2013	No	Erosion of natural deposits.
Barium (ppm)	2	2	0.0053	ND	0.0053	2011	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Microbiological Contaminants								
Total Coliform (positive samples/month)	0	1	0	NA	NA	2013	No	Naturally present in the environment.
Contaminants								
Contaminants	MCLG	AL	NSF Dahlen's Water	# Samples Exceeding AL	Sample Date	Exceeds AL	Typical Source	
Inorganic Contaminants								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.24	0	2013	No	Corrosion of household plumbing systems; Erosion of natural deposits.	
Lead - action level at consumer taps (ppb)	0	15	<2.0	0	2013	No	Corrosion of household plumbing systems; Erosion of natural deposits.	

Additional Contaminants

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water.

Contaminants	MCL	NSF Dahlen's Water	Sample Date	Violation	Explanation and Comment
Sulfate	250 ppm	31.3 ppm	2011	No	Erosion of natural deposits.
Chloride	250 ppm	2.6 ppm	2011	No	Erosion of natural deposits.

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
positive	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information or to get involved with Dahlgren's drinking water system, please contact:

Contact Name: Amanda Stella
Address:
18329 Thompson Rd, Suite # 226
Dahlgren, VA, 22448
Phone: (540) 653-1683
Fax: (540) 653-6242