

DEPARTMENT OF THE NAVY
ENVIRONMENTAL OFFICE
1 SIMONPIETRI DRIVE
NEWPORT, RI 02841
FOR OFFICIAL BUSINESS



NAVAL STATION NEWPORT DRINKING WATER CONSUMER CONFIDENCE REPORT

Water Quality Report for Calendar Year 2015

For our customers in the towns of Portsmouth Middletown and Newport

Prepared by NAVSTA Public Works
Environmental and Utilities Divisions

The preparation and distribution of this report to our customers is required by the United States Environmental Protection Agency (EPA). Naval Station (NAVSTA) Newport is committed to providing our customers with high quality drinking water. We work closely with the City of Newport's Water Division, which is our water supplier. We have also made investments in water monitoring facilities, water quality monitoring, and improvements to the distribution systems in order to deliver a quality product to our customers. We are pleased to report this information along with the results of our 2015 water quality testing directly to you, so **you will know about your drinking water first hand.**

In this issue

- Your Drinking Water Source
- Facts About Your Water
- Source Water Assessment
- 2015 Water Quality Report
- Definitions & Notes
- Additional Health Information
- Public Notice

Your Drinking Water Source

Here are some simple facts you should know about the water you drink. Aquidneck Island contains seven fresh water ponds that serve as drinking water resources. These include Easton North Pond, Easton South Pond, Lawton Valley Reservoir, Gardiner Pond, Saint Mary's Pond, Paradise Pond and Sisson Pond. There are also two additional drinking water resources located off of Aquidneck Island; Nonquit Pond in Tiverton and Watson Reservoir in Little Compton. These ponds and reservoirs are interconnected through a complex network of pipelines and pumping stations. They are located in a basin area totaling 18.625 square miles or 11,920 acres of rural, forested and some developed land.

The Navy purchases tap water from the City of Newport and the Portsmouth Water and Fire District. The water is treated at either of Newport's two treatment plants before being distributed to Naval Station Newport or Fort Adams. A majority of the base receives water from the City of Newport's Lawton Valley Treatment Plant. The new Lawton Valley Treatment Plant, located in Portsmouth, came online September 17, 2014. The remaining portion of the water comes from the Station 1 Newport Treatment Plant in Newport. This plant is the primary supplier for Coasters Harbor Island, the Naval Health Clinic New England and the Fort Adams public water system. Station 1 was built in 1991 and upgraded in 2013-2014. The final upgrade to the Station 1 Treatment Plant went online the end of July 2014. The treatment plants have a combined capacity of 16 million gallons per day and service over 1,100 Navy connections through a distribution system of more than 62 miles of piping.

Naval Station Newport conducts daily, weekly, monthly, quarterly and annual testing to ensure you receive safe, high quality, drinking water. The Utilities Branch of Public Works is responsible for operating our water system. Operation and maintenance of the water distribution system includes: routine flushing of the water lines; and the management of 785 fire hydrants, 5 pump houses with several pumps and motors, and over 1500 distribution valves. In total, more than \$250,000 was spent on maintenance and water quality testing to ensure the safe and effective operation of the water system. The Navy also completed modeling of the water system and used this information to develop a 5 Phase Rehabilitation Plan. The plan consists of capital improvements to our water distribution system with construction beginning in 2015 and extending through 2019. The first phase of this project, replacement of the water line on Defense Highway, was completed recently. Further phases of this project include replacement of waterlines at several Housing areas, Fort Adams, Coddington Point, and Coasters Harbor Island, as well as rehabilitation of Reservoir 50 which provides essential fire protection water.

Facts About Your Water

Drinking water, including bottled water, may be reasonably expected to contain at least some small amounts of certain substances, which the EPA calls "contaminants." The presence of these substances does not necessarily indicate that the water poses a health risk. More information about the substances found in your water and their potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791.

Additionally, the NAVSTA Water Program Manager, can be reached at (401) 841-6376 or by email at antonio.leite@navy.mil to answer any questions. This 2015 report as well as previous annual reports can be found online at

http://www.cnic.navy.mil/regions/cnrma/installations/ns_newport/om/environmental_support/drinking_water.html

Source Water Assessment

The University of Rhode Island (URI), in cooperation with Rhode Island Department of Health (RIDOH) and other state and federal agencies, has assessed the threats to water supply sources. The assessment considered the intensity of development; the presence of businesses that use, store or generate potential contaminants; how easily contaminants may move through the water-sheds; and the sampling history of the water. The assessment results are being used to plan source protection efforts in the future.

The assessment found the water sources on Aquidneck Island, Little Compton and Tiverton are moderately susceptible to contamination. The average ranking for the entire system is based on land use and existing water quality. Because most land in source water areas are privately owned, the focus of the assessments has been on identifying threats from land use so local governments, residents, and water suppliers can take action to protect valuable drinking water supplies. This means monitoring and protection efforts are especially important to assure continued water quality. The complete Source Water Assessment Report is available from the Newport Water Division or by calling the Rhode Island Department of Health, Office of Drinking Water Quality at (401) 222-6867.

2015 Water Quality Report

This table shows the results of the combined water quality analyses for both Naval Station Newport and Fort Adams for the period January 1, 2015 to December 31, 2015. Not all substances were detected in every system or required to be tested in every system.

| Substance | Highest Allowed by Law (MCL) | Ideal Goals (MCLG) | Highest Levels | | SDWA Violation | Detected Range | Major Sources in Drinking Water |
|---|------------------------------|--------------------|-----------------------|------------|----------------|----------------|---|
| | | | Naval Station Newport | Fort Adams | | | |
| Inorganic Compounds | | | | | | | |
| Copper (ppm) (a) | AL=1.3 | 1.3 | 0.12 | 0.04 | No | n/a | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. |
| Lead (ppb) (a) | AL = 15 | 0 | 10 | 2 | No | n/a | Corrosion of household plumbing systems; Erosion of natural deposits. |
| Disinfectants | | | | | | | |
| | (MRDL) | (MRDLG) | | | | | |
| Chlorine (ppm) | 4 | 4 | 1.59 | | No | 0.01 - 1.59 | Water additive used to control microbes. |
| Chlorine (ppm) | 4 | 4 | | 0.40 | No | 0.03 - 0.40 | Water additive used to control microbes. |
| Disinfection Byproducts | | | | | | | |
| | (MCL) | (MCLG) | | | | | |
| Total Trihalomethanes (ppb) | 80 | N/A | 58.9 | | No | 11.4 - 58.9 | By-product of drinking water chlorination. |
| Total Trihalomethanes (ppb) | 80 | N/A | | 73.7 | No | n/a | By-product of drinking water chlorination. |
| Haloacetic Acids (ppb) | 60 | N/A | 9.3 | | No | 2.7 - 9.3 | By-product of drinking water chlorination. |
| Haloacetic Acids (ppb) | 60 | N/A | | 6.7 | No | n/a | By-product of drinking water chlorination. |
| Microbiology | | | | | | | |
| | (MCL) | (MCLG) | | | | | |
| Total Coliform Bacteria (% of positive samples) | 5% | 0% | 3.23% | 0% | No | n/a | Naturally present in the environment |

Definitions & Notes

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 (Maximum Contaminant Level) The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDLG (Maximum Residual Disinfectant 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 (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.

ppm (parts per million) equivalent of 1 penny in \$10,000 or 1 milligram per liter (mg/L)

ppb (parts per billion) equivalent of 1 penny in \$10,000,000 or 1 microgram per liter (ug/L)

AL (Action Level) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

n/a Not applicable

(a) Detected level indicates the 90th percentile value of 23 samples at Naval Station Newport and 7 samples at Fort Adams. No sites exceeded the lead or copper action level at Fort Adams. Two sites exceeded the lead action level at Naval Station Newport; no sites exceeded the copper action level at Naval Station Newport.

Consumers may review the City of Newport's Consumer Confidence Report on the web at:

<http://www.cityofnewport.com/ccr15>

Consumers may review the Portsmouth Water and Fire District's Consumer Confidence Report on the web at:

<http://www.portsmouthwater.org/waterquality15.htm>

Additional Health Information

The sources of drinking water, both tap and bottled, 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 human activity. Other contaminants, including volatile organic chemicals, which are by-products of industrial processes, can come from gas stations or urban storm water runoff. We have included the health effects information for any contaminant near the Maximum Contaminant Levels (MCL) and any unusual contaminants.

Contaminants that may be present in the source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and septic systems.
- 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 storm water runoff and septic systems.
- 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 which limit the amount of certain contaminants in water provided by public water supply systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Station Newport is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 two minutes before using water for drinking or cooking. 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 or at www.epa.gov/safewater/lead.

Total Trihalomethanes: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

General Health Effects Note: 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 / Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Treatment Note: Customers of Newport Water, which includes all Navy customers, may at times receive water with a yellow to brown color. This is occasionally due to the level of naturally occurring mineral "manganese" in the reservoirs and ponds. This mineral does not respond to treatment. The EPA has established secondary drinking water regulations for contaminants such as manganese which are recommended goals. These contaminants primarily affect aesthetic qualities (taste, color, and odor) of drinking water. Newport Water balances the treatment processes to meet both the enforceable levels of the primary drinking water regulations with the goals of the secondary drinking water regulations. Newport Water and the Navy regret the inconvenience of the discolored water and we work diligently to avoid these situations.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Naval Station Newport

PW # RI1000016

1 Simonpietri Drive

Newport, RI 02841

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. In the fourth quarter of 2015, we did not complete monitoring or testing for Disinfection Byproducts [Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s)] at the required time and therefore cannot be sure of the quality of your drinking water during that time. TTHMs and HAA5s are a group of chemicals that are formed when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. The standard for TTHMs is 80 µg/L and for HAA5s is 60 µg/L. We are required to sample two locations in the first week of November; however, a sample was not taken until December 22nd, outside the required monitoring period. The results of the December sample, although not valid for compliance, were below the standards, 56 µg/L for TTHMs and 9 µg/L for HAA5s at the Davis Street Community Center and 64 µg/L for TTHMs and 5 µg/L for HAA5s at Building 292. Our locational running annual average, which is used for compliance and was calculated using data from the first three quarters of 2015, is 79 µg/L for TTHMs and 13 µg/L for HAA5s at Davis Street Community Center and 46 µg/L for TTHMs and 13 µg/L for HAA5s at Building 292.

For more information, please contact Antonio Leite at (401) 841-6376 or email at antonio.leite@navy.mil.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.