



2013 CONSUMER CONFIDENCE REPORT


A
Closer
Look at
Water
Quality

Naval Support Activity South Potomac
Naval Support Facility Indian Head
Maryland Public Water System PWSID #0080058 and #1080039

◆ Naval Support Activity South Potomac is pleased to present to you the Naval Support Facility (NSF) Indian Head Annual Water Quality Report for 2013. This report gives detailed information on the source of our water, its components and the health risks associated with any contaminants and is based on information acquired in year 2013 sampling events. You'll find that we supply water that surpasses or meets all federal and state water quality regulations. With equal importance, we place a strong focus on acting as stewards in protecting and preserving our environment.

◆ In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the Safe Drinking Water Act (SDWA). The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA and routinely conducts sanitary surveys, inspections and a yearly monitoring schedule for all public water systems that includes collection of monthly bacteria samples, annual nitrate samples, and monitoring of chlorine disinfectant residuals.



◆ 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 EPA's [Safe Drinking Water Hotline \(800-426-4791\)](tel:800-426-4791) or visiting the EPA website www.epa.gov/OGWDW. 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 compounds, 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.



NSFIH continually monitors its drinking water for contaminants. This water is safe to drink; however, 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 (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline.

Safe Drinking Water Hotline - 1-800-426-4791 - www.epa.gov/OGWDW

Water Source Information

◆ Groundwater from four Indian Head wells and two Stump Neck wells drilled to the Patapsco and Patuxent Aquifers supply the water for both NSFIH and Stump Neck Annex.

◆ An aquifer is an underground geologic formation of sand, gravel or rock through which water can pass and is stored. Because the layers of sand, gravel and rock provide a natural filtration, groundwater is usually clear when it is pumped out of the ground; thus, it can be disinfected without prior treatment. NSFIH wells are deep wells and are protected by these layers from most contaminants and bacteria.

Sources of your drinking water include the Patapsco and Patuxent Aquifers.

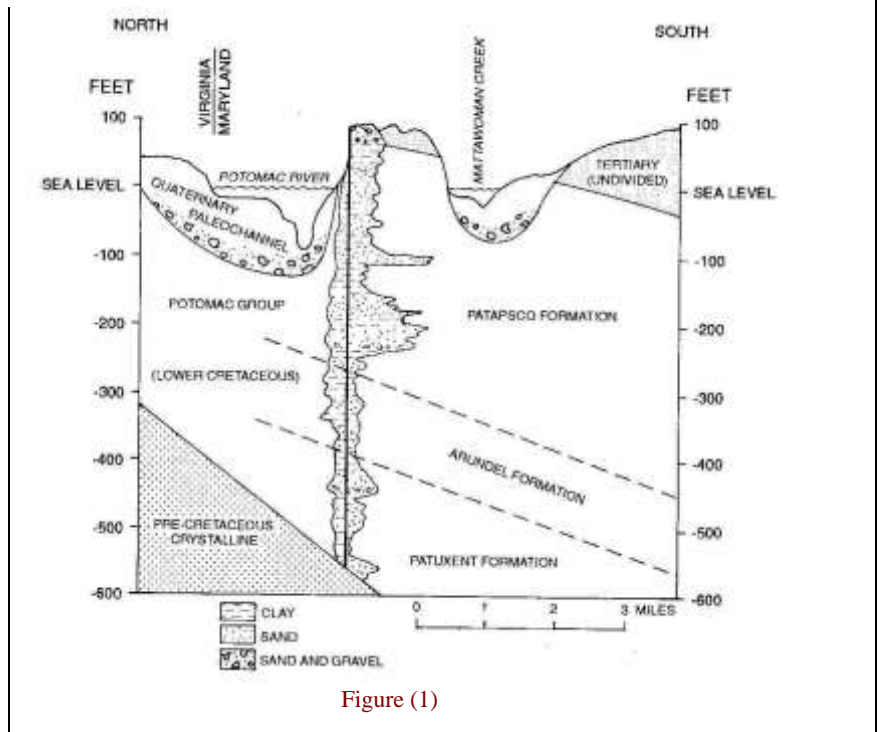


Figure (1)

◆ As water is pumped from the well, chlorine is added as a disinfectant to protect water from any bacteria in the distribution system. Water from

all the wells then flows either into the pipes of the distribution system, where it is delivered to the tap and you, the consumer, or it is directed into storage tanks and held there until needed

Source Water Assessment

As of March 31, 2006, the Maryland Department of the Environment (MDE) has completed source water assessments for all public water systems in the State. The required components of this report are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply system to contamination. A Source Water Assessment was completed for both the Naval Support Facility Indian Head and the Stump Neck Annex. Both water systems were determined not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The Naval Support Facility Indian Head

water system was determined to be susceptible to naturally occurring radiological contaminants. For information on the Source Water Assessment report, go to the MDE website at:

http://www.mde.maryland.gov/programs/water/water_supply/source_water_assessment_program/pages/program_s/waterprograms/water_supply/sourcewaterassessment/factsheet.aspx

Water Quality Monitoring for 2013



◆ The 2013 NSF/ISHM drinking water monitoring schedule involved collecting routine monthly samples for bacteria at several sites approved by MDE and samples collected annually for nitrates, total trihalomethanes (TTHM) & haloacetic acids (HAA5) (disinfection byproducts). Samples were also taken in 2013 for coliforms, lead and copper at the consumers tap, metals Phase II/V, Secondary Contaminants, arsenic, fluoride, sodium, and corrosivity. MDE assisted NSF/ISHM in 2013 by taking samples for volatile

organic compounds and radionuclides.

[All sample results were under the maximum contaminant levels allowed by EPA and MDE regulations.](#)

The table below shows the contaminants detected in your finished water between January 1 and December 31, 2013 at both NSF Indian Head and Stump Neck Annex water systems. The table also shows the highest results for samples taken within the past five years for contaminants that were not sampled in 2013.

◆ Samples for iron exceeded Secondary Maximum Contaminant Levels which are non-enforceable guidelines regulating contaminants based on aesthetic considerations (e.g., taste, odor, or color) and are not considered a health issue by EPA.

DEFINITIONS FOR WATER QUALITY MONITORING RESULTS

Community Water System – A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Inorganic Chemicals – Chemical substances of mineral origin, such as lead and copper.

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

Maximum Contaminant Level Goal (MCLG) – The level of contaminant in drinking water below which there is no known or expected risk to health.

Microbiological Contaminants – Tiny organisms, such as bacteria, algae, plankton, and fungi.

mg/L – Milligrams per liter; parts of contaminant per million parts of water

ND – Non-Detection. Laboratory analysis indicates the contaminant is not present.

ppm, ppb – part per million, part per billion. Measurements of the amount of contaminant per unit of water. One part per million corresponds to one minute in two years or a single penny in \$10,000 and a part per billion is like a penny in \$10,000,000.

pCi/L – picocuries per liter (a measure of radioactivity in water)

Secondary Maximum Contaminant Level (SMCL) – These levels represent reasonable goals for drinking water quality and are not federally enforceable.

Trihalomethanes (THM) – Four separate compounds (chloroform, dichlorobromomethane, dibromochloromethane, and bromoform) that form as a result of disinfection.

Unregulated Contaminants – Substances that do not pose a threat to public health or are under consideration for further study to determine if a health risk exists.

💧 WATER QUALITY DATA CHART FOR 2013 💧

(Of contaminants sampled, only the highest result is listed – if a contaminant is not detected, it is not listed.)

Contaminant	Unit	MCL (Highest Level Allowed)	MCLG (EPA Goal)	Highest Level Detected	Violation Y/N	Year Tested	Typical Source of Contaminant
MICROBIOLOGICAL CONTAMINANTS							
Total Coliform Bacteria	Sample	1 positive per month	0 positive	1 positive in year 2013	N	2013	Naturally present in the environment
DISINFECTION BYPRODUCTS							
Total Trihalomethanes	ppb	80	N/A	Range: 0.9 – 24.6	N	2013	Byproduct of drinking water disinfection.
Haloacetic Acids	ppb	60	N/A	Range: 0.0 – 9.2	N	2013	Byproduct of drinking water disinfection.
INORGANIC CONTAMINANTS							
Barium	ppb	2000	2000	14	N	2013	Discharge of drilling wastes and metal refineries; erosion of natural deposits.
Chromium	ppb	100	100	4	N	2013	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	ppb	4000	4000	1400	N	2013	Erosion from natural deposits; Runoff from fertilizer and aluminum factories
Nitrate	ppb	10000	10000	ND	N	2013	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
ORGANIC CONTAMINANTS							
Dalapon	ppb	200	200	0.29	N	2013	Runoff from herbicide used on rights of way
Toluene	ppb	1000	1000	7.1	N	2012	Discharge from petroleum factories
RADIONUCLIDES							
Gross Beta	pCi/L	50	0	6.7	N	2010	Decay of natural and man-made deposits
Gross Alpha	pCi/L	15	0	2.0	N	2011	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Radium – 226	pCi/L	5	0	0.3	N	2010	Erosion of natural deposits.
Combined Radium 226 & 228	pCi/L	5	0	0.3	N	2010	Erosion of natural deposits.
Lead and Copper in Distribution System MCL determined in the 90th Percentile							
Lead	ppb	15	N/A	ND	N	2013	Lead present in pipes and soldered connections dissolves into water.
Copper	ppb	1300	N/A	260	N	2013	Copper from pipes dissolves into water.
Secondary Contaminants SMCLs are <u>non-enforceable</u> guidelines regulating contaminants that may cause aesthetic effects							
Chloride	ppb	SMCL 250000	N/A	22100	N	2013	Dissolving salt deposits, salting of highways, chemical industry effluent, oil well operations, sewage, irrigation drainage, refuse leachate

Secondary Contaminants - Continued
SMCLs are non-enforceable guidelines regulating contaminants that may cause aesthetic effects

Substance	Unit	MCL (Highest Level Allowed)	MCLG (EPA Goal)	Highest Level Detected	Violation Y/N	Year Tested	Major Source
Iron	ppb	SMCL 300	N/A	370	N	2013	Erosion of natural deposits; household piping
Manganese	ppb	SMCL 50	N/A	39	N	2013	Naturally present in the environment

UNREGULATED CONTAMINANTS
Sampling not required by Federal or State Law

Nickel	ppb	N/A	N/A	2.3	N	2010	Erosion of natural deposits;
Radon – 222*	pCi/L	N/A	N/A	167.1	N	2010	Erosion of natural deposits.
Sodium	ppm	N/A	N/A	Range 76 to 169	N	2013	N/A
Sulfate	ppm	N/A	N/A	10	N	2013	N/A

**Radon – 222 is a colorless, odorless gas that occurs naturally in soil, air and water. Radon is formed from the radioactive decay products of natural uranium that is found in many soils. Most radon in indoor air comes from the soils below the foundation of the home and in some locations can accumulate to dangerous levels in the absence of proper ventilation. In most homes, the health risk from radon in drinking water is very small compared to the health risk from radon in indoor air. For more information, call the EPA's Radon Hotline at 1-800-SOS-RADON.*

We have detected radon in the finished water supply as noted in the unregulated contaminants table above. There is currently no federal regulation for radon levels in drinking water; however, in 1999 the EPA proposed an MCL of 300 pCi/l and an alternative MCL (AMCL) of 4,000 pCi/L. At present, these are still in the proposal stage. Exposure to air-transmitted radon over a long period of time may cause adverse health effects.



STATEMENT ABOUT LEAD

(This statement is required by 2009 EPA promulgated revisions to the CCR)

“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. NSF/ISH 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 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.”



For Additional Information

For more information on the Consumer Confidence Report or water quality, please contact the persons listed.

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