



# **2023 Consumer Confidence Report**

**Naval Support Activity South Potomac**

**Naval Support Facility Indian Head  
and Stump Neck Annex  
Indian Head, Maryland**

**Maryland Public Water Systems:  
MD0080058 and MD1080039**

Naval Support Facility Indian Head (NSFIH) is pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.



To reduce water loss due to leakage and reduce costs associated with repairs, NSFIH is actively replacing the Installation's underground water distribution lines. Ongoing maintenance will continue to ensure the high quality of your drinking water.

*Throughout the report, italicized text reflects required information by the EPA or MDE.*

### **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 (SN). Throughout this report, the use of "NSFIH" refers to NSFIH main side as well as 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 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.

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 SDWA. The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA. MDE routinely conducts inspections and provides a yearly monitoring schedule for all public water systems. Monitoring schedules include the collection of monthly bacteria samples, annual nitrate samples, monitoring of chlorine disinfectant residuals, and other parameters sampled in multi-year intervals. In addition to the EPA and MDE, the NSFIH Public Works Department conducts routine inspections and sampling to ensure the highest water quality is provided to the consumer.

There are many different ways for you to get involved in the safety of your drinking water. If there are issues or concerns with your drinking water, contact the Environmental Office NSFIH at (540) 295-2019. Reporting issues immediately can help prevent any problems from escalating. Your input is important to us! Check the MDE and EPA websites linked below to stay up to date with the newest SDWA regulations and topics.

- <https://mde.maryland.gov/programs/water>
- <https://www.epa.gov/environmental-topics/water-topics>

Your water is treated by disinfection with sodium hypochlorite. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. According to the Centers for Disease Control and Prevention, disinfection is considered one of the major public health achievements of the 20th century.





### **Important Health Information**

*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/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 (800-426-4791).*



*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. NSFIIH is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to*

*reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.*

*If you are concerned about lead in your water and you wish to have your water tested, contact the NSFIIH Environmental Office at (540) 295-2019. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.*

### **Lead in Priority Areas**

Lead exposure from drinking water pipes, fittings or faucets is a particular concern for children. The EPA recommends schools and childcare facilities test the lead content of drinking water. The Navy adopted the recommendation as policy and tests the Child Development, Youth Activity and Teen Centers every five years.

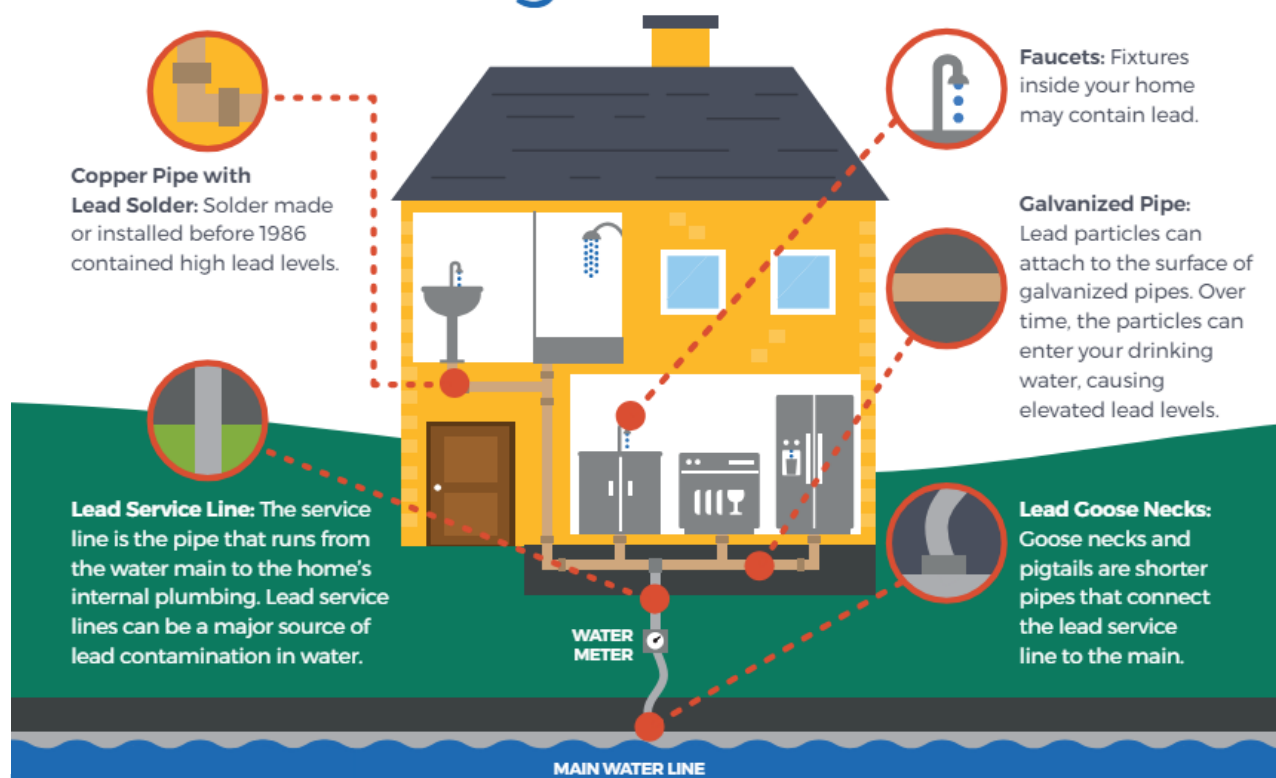
Between 29 June and 25 September 2019, NSFIIH tested 86 water outlets for lead across the three centers in accordance with established sampling protocols. Of those outlets, four exceeded the EPA established 15 parts per billion (ppb) action level for lead. These outlets were in vacant rooms or not used as a source of drinking water. Personnel removed or replaced each fixture that exceeded the 15-ppb level with a new lead-free fixture to ensure the safety of children and staff. NSFIIH plans to complete sampling again in 2024 and will provide advance notification to parents, caregivers and staff. To learn more about lead in drinking water in schools and day care centers visit the following EPA website:

<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#schools>.



CONCERNED ABOUT LEAD IN YOUR DRINKING WATER?

## Sources of LEAD in Drinking Water



### Reduce Your Exposure To Lead



Use only cold water for drinking, cooking and making baby formula. *Boiling water does not remove lead from water.*



Regularly clean your faucet's screen (also known as an aerator).



Consider using a water filter certified to remove lead and know when it's time to replace the filter.



Before drinking, flush your pipes by running your tap, taking a shower, doing laundry or a load of dishes.

### Identify Other Lead Sources In Your Home

Lead in homes can also come from sources other than water. If you live in a home built before 1978, you may want to have your paint tested for lead. **Consider contacting your doctor to have your children tested if you are concerned about lead exposure.**



## Why are there substances in my 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 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, can pick up substances resulting from the presence of animals or from human activity:*

- *Microbial contaminants, such as viruses and bacteria that may come from 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 residential use.*
- *Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial 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 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 human health.*

## 2023 Water Quality Monitoring



The 2023 NSF/HI drinking water monitoring schedule required collecting routine monthly samples for bacteria at several sites approved by MDE, samples collected annually for nitrates, and disinfection byproducts including total trihalomethanes (TTHM) & haloacetic acids (HAA5). All sample results were under the maximum contaminant levels allowed by the EPA, MDE, and Navy regulations.

MDE allows public water systems 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. Some

of the data, though representative, are more than one year old but represent the most recent testing done in accordance with drinking water regulations. To help you better understand terms used throughout this report, we have provided definitions on pages 6. Sample results are provided on pages 7 and 8.

### **Water Quality Definitions**

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

**Action level goal (ALG):** *The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.*

**Average:** *Regulatory compliance with some MCLs are based on running annual average of monthly samples.*

**Chlorine Disinfectant Residual:**

*Concentration of chlorine remaining in the distribution system, which prevents growth of microbes.*

**Level 1 Assessment:** *A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.*

**Level 2 Assessment:** *A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform have been found in our water system on multiple occasions.*

**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.*

**Maximum Residual Disinfectant Level (MRDL):** *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.*

**Maximum Residual Disinfectant Level Goal (MRDLG):** *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.*

**mg/L:** *Milligrams per liter or parts per million; number of milligrams of substance in one liter of water.*

**mrem:** *Millirems per year (a measure of radiation absorbed by the body).*

**N/A:** *Not applicable.*

**ND:** *Non-Detection. Laboratory analysis indicates the contaminate is not present.*

**ppb:** *Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.*

**ppm:** *Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.*

**pCi/L:** *picocuries per liter (a measure of radioactivity in water).*

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

**Treatment Technique (TT):** *A required process intended to reduce the level of a contaminant in drinking water.*

**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 Results								
Naval Support Facility Indian Head: Regulated Contaminants								
Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Disinfectants and Disinfection By-Products</b>								
Chlorine	2023	0.8	0.6 - 0.8	MRDLG = 4	MRDL = 4	ppm	No	Water additive to control microbes.
Total Trihalomethanes (TTHM)	2023	<1.0	<1.0	NA	80	ppb	No	By-product of drinking water disinfection
Haloacetic Acids (HHA5)	2023	<2.0	<1.0 - 2	NA	60	ppb	No	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>								
Flouride	2023	0.97	0.97 - 0.97	4	4	ppm	No	Erosion of natural deposits; Water additive to promote strong teeth; Discharge from fertilizers and aluminum factories.
Barium	2023	0.006	0.006 - 0.006	2	2	ppm	No	Discharge of drilling wastes or metal refineries; Erosion of natural deposits.
Nitrate	2023	1	0-1	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Microbiam Contaminants</b>								
Total Coliform	2023	ND	N/A	0	1	Positive Samples/month	No	Natuarily present in the environment.
<b>Radioactive Contaminants</b>								
Beta/Photon Emitters	2021	4.4	0-4.4	0	50	pCi/L	No	Decay of natural and man-made deposits.
Combined Radium 226/228	11/2/2021	1.6	1.6 - 1.6	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excuding radon and uranium	11/2/2021	2.2	2.2 - 2.2	0	15	pCi/L	No	Erosion of natural deposits.
<b>Lead and Copper*</b>								
Contaminant	Collection Date	MCLG	AL	90th Percentile	# Sites Over AL	Units	Likely Source of Contamination	
Copper	8/4/2022	1.3	1.3	0.19	0	ppm	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.	
Lead	8/4/2022	0	15	2.9	0	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.	

\* - The 2022 Consumer Confidence Report did not include the 2022 Copper and Lead sample results.



Water Quality Results								
Naval Support Facility Indian Head - Stump Neck Annex: Regulated Contaminants								
Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Disinfectants and Disinfection By-Products</b>								
Chlorine	2023	1.0	0.4- 1	MRDLG = 4	MRDL = 4	ppm	No	Water additive to control microbes.
<b>Total Trihalomethanes (TTHM)</b>	8/30/2022	28.1	28.1 - 28.1	No goal	80	ppb	No	By-product of drinking water disinfection.
<b>Haloacetic Acids (HHA5)</b>	8/30/2022	4.4	4.4 - 4.4	No goal	60	ppb	No	By-product of drinking water disinfection.
<b>Inorganic Contaminants</b>								
Flouride	4/26/2022	1.2	1.1 - 1.2	4	4	ppm	No	Erosion of natural deposits; Water additive to promote strong teeth; Discharge from fertilizer and aluminum factories.
Barium	4/26/2022	0.0089	.006 - .0089	2	2	ppm	No	Discharge of drilling wastes or metal refineries; Erosion of natural deposits.
Nitrate	2023	<1.0	<1.0	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Microbiam Contaminants</b>								
Total Coliform	2023	ND	N/A	0	1	Positive Samples/month	No	Naturally present in the environment.
Contaminant	Collection Date	MCLG	AL	90th Percentile	# Sites Over	Units	Likely Source of Contamination	
<b>Lead and Copper*</b>								
Copper	8/11/2022	1.3	1.3	0.29	0	ppm	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.	
Lead	8/11/2022	0	15	4.6	0	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.	
* - The 2022 Consumer Confidence Report did not include the 2022 Copper and Lead sample results.								

EPA Finalized MCL and MCLG for PFAS in Drinking Water		
Compound	Final MCLG	Final MCL (enforceable levels)
PFOA	Zero	4.0 parts per trillion (ppt) (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA (commonly known as GenX Chemicals)	10 ppt	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index

## Per- and Polyfluoroalkyl (PFAS) Sampling and Monitoring

### What are per- and polyfluoroalkyl substances and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the U.S., since the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) currently used for fighting petroleum fires at airfields and in industrial fire suppression processes. PFAS chemicals are persistent in the environment and some are persistent in the human body – meaning they do not break down and they can accumulate over time.



Source: <https://www.tetrachteurope.com/the-impacts-of-forever-chemicals-on-real-estate-transactions/>

### Is there a federal or Maryland regulation for PFAS in drinking water?

On April 10, 2024, the EPA established MCLs for a subset of PFAS chemicals, provided on page 7. EPA requires implementation of sampling in accordance with the new MCLs within three years of the publication date and implementation of any required treatment within five years.

These limits did not apply for the 2023 calendar year because they had not been published. However, the DoD proactively promulgated policies to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every two years. The DoD policy states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than the 2016 EPA health advisory (HA) level of 70 ppt, water systems must take immediate action to reduce exposure to PFOS or PFAS. For levels less than 70 ppt but above the 4 ppt level (draft at the time of policy publication), DoD committed to planning for implementation of the levels once EPA's published MCLs take effect.

### Has NSFIIH tested its water for PFAS in 2023?

Yes. In October 2023, samples were collected from Wells 15A, 16A, 17A, SN 2012 and SN 43A. Well 1 was last sampled in 2020 and will be resampled when the well is back in operation. We are pleased to report that drinking water testing results were below the Method Reporting Limit (MRL) for all 29 PFAS compounds covered by the sampling method, including PFOA and PFOS. This means that PFAS were not detected in your water system. In accordance with DoD policy, the water system will be resampled every two years for your continued protection.

MDE conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website:

<https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

### Replacement of Potable Water Lines

The Energy Resilience and Conservation Investment Program (ERCIP) is a subset of the Defense-wide Military Construction (MILCON) Program specifically intended to fund projects that save energy and water. In 2014, NSFIIH identified resilience and redundancy concerns related to its potable water distribution system and developed a project to replace the existing lines and add key equipment such as additional flushing hydrants and isolation valves. In 2019, NSFIIH received project approval totaling over \$30 million dollars. The line replacement started in the beginning of 2023 and will continue for the next two years.



### Lead Service Line Inventory

The EPA Lead and Copper Rule Revisions (LCRR) requires all Community Water Systems (CWS) and Non-Transient Non-Community Water Systems (NTNCWS) to develop a pipe material service line inventory. NSFIIH is actively investigating each building with a potable water connection to determine the pipe material and, in the future, replace any lead pipes found. PWD appreciates your assistance with access to buildings and homes!

### Keep the Wipes out of the Pipes!



Only flush the three Ps: Pee, Poop, and (toilet) Paper. Unfortunately, many wipes labeled “flushable” do not disintegrate. If wipes come into contact with fats, oils, and grease in the sewer lines, they can congeal and form fatbergs that can cause sewage backups and sanitary sewer overflows into the environment. Dryer sheets, dental floss, feminine products, facial tissues, diapers, and paper towels can also cause backups and overflows. Sewage overflows or backups into homes and offices create a health risk due to increased levels of bacteria and disease-causing pathogens. Clogs can also do costly damage to infrastructure, including sewage lines and our wastewater treatment plant.

**For more information on...**

**Utilities, water leaks, or related, please contact:**

Water Works Utilities Supervisor

Jeffrey Goldsmith, Utilities

4120 Lloyd Road, Building 3162

Indian Head, MD 20640-5157

Phone: (301) 744-4785

Email: Jeffrey.S.Goldsmith.civ@us.navy.mil

**The Consumer Confidence Report, water quality,  
or related, please contact:**

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