



NSF REDZIKOWO 2023 DRINKING WATER CONSUMER CONFIDENCE REPORT



Is our water safe to drink?

Yes. Naval Support Facility (NSF) Redzikowo provides water that is safe and Fit for Human Consumption (FFHC) as determined by the Installation Commanding Officer's Record of Decision dated November 23, 2021 for the Main Base.

Our drinking water fully complies with the OEBGD (Overseas Environmental Baseline Guidance Document), Final Governing Standards (FGS) and the Navy CNICINST 5090.1B. This report includes a comprehensive list of sampled analytes with individual associated maximum contaminant levels (MCLs). A detailed list of parameters found in our drinking water is included in this report, along with a comparison to the maximum levels considered safe for the general public by these standards.

Why are there contaminants in drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels 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.

Due to this, contaminants may be present in the source of drinking water, to include:

- **Microbial contaminants**, such as viruses and bacteria, that may come from wildlife, sewage treatment plants, septic systems, and livestock;
- **Disinfection by-products**, such as trihalomethanes (TTHM) disinfection by-products commonly produced during the chlorination of water;
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- **Inorganic contaminants**, naturally occurring 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;
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, Environmental Protection Agency (EPA) has regulations that limit the amount of certain contaminants in water provided by public water systems. Regular sampling is conducted to detect the level of contaminants in the water system. If the results are above regulatory levels, you will be notified by e-mail and Public Notification.

You can learn more about contaminants and potential health effects by visiting the EPA Drinking Water Standards web site:

<http://permanent.access.gpo.gov/lps21800/www.epa.gov/safewater/standards.html>.

Where does our water come from and how is it treated?

The Main base NSF Redzikowo water comes from 2 wells situated inside the Base with origin from resources of both the Vistula River Catchment Area and the Lower Vistula Water in the Pomeranian region and are approximately 90 M (290 feet) from the treatment plant WSB.

Water Quality Data Table

The following tables list all of the drinking water contaminants and relevant sampling data collected during the 2023 calendar year. Only those contaminants detected in the water are presented. All contaminants detected in NSF Redzikowo’s drinking water are below their respective MCLs allowed by applicable EPA, OEBGD and FGS Poland requirements listed below.

Table 1. Main Base Lead and Copper. Tested Semi-annually.

LEAD AND COPPER						
Contaminant	EPA’s Action Level	Ideal Goal (EPA’s MCLG)	90% of the Test Levels were Less Than	#of Tests With Levels Above EPA’s Action Level	Violation	Typical Sources
Lead	15ppb	0	3.1ppb	0 of 11	no	corrosion of household plumbing
Copper	1.3ppm	1.3ppm	1.21ppm	0 of 11	no	corrosion of household plumbing

Table 2. Sampling Results Showing the Detection Organics

ORGANIC CHEMICAL						
Contaminant	Highest Level allowed (EPA’s MCLG) ppm	Ideal Goal (EPA’s MCLG) ppm	Highest Result ppm	Range of Test results ppm	Violation	Typical Sources
Xylene (total)	10	10	0.00058	0.00058	no	Discharge from petroleum factories; discharge from chemical factories

Table 3. Sampling Results Showing the Detection of TTHM

TTHMs						
Contaminant	Highest Level allowed (EPA's MCLG) ppm	Ideal Goal (EPA's MCLG) ppm	Highest Result ppm	Range of Test results ppm	Violation	Typical Sources
Chloroform	0.03	N/A	0.0187	0.0187	no	Byproduct of drinking water disinfection
Bromodichloromethane	0.015	0	0.0104	0.0104	no	Byproduct of drinking water disinfection
Total Trihalomethanes	0.08	N/A	0.0291	0.0291	no	Byproduct of drinking water disinfection

Table 4. Sampling Results Showing the Detection OF HAA5

HALOACETIC ACIDS						
Contaminant	Highest Level allowed (EPA's MCLG) ppm	Ideal Goal (EPA's MCLG) ppm	Highest Result ppm	Range of Test results ppm	Violation	Typical Sources
Dichloroacetic acid	0.06	0	0.011	0.009-0.011	no	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA5)	0.06	NA	0.011	0.009-0.011	no	Byproduct of drinking water disinfection

Table 5. Sampling Results Showing the Detection OF Radionuclide

RADIONUCLEOTIDE'S						
Contaminant	Highest Level allowed (EPA's MCLG)	Ideal Goal (EPA's MCLG)	Highest Result	Range of Test results	Violation	Typical Sources
Gross Alpha (pCi/L)	15pCi/L	0	0.89	(-0.033) - 0.89 pCi/L	no	erosion
Gross Beta (pCi/L)	4mrem	0	2.0pCi/L	1 - 2 pCi/L	no	erosion
Radium 226/228 (pCi/L)	5 pCi/L	0	0.612	0.125 - 0.612 pCi/L	no	erosion
Tritium 2702 pCi/L (100Bq/L)	2702 pCi/L (100Bq/L)	0	110pCi/L	(-59) - 110 pCi/L	no	erosion
Radon	2702 pCi/L (100Bq/L)	0	3.8Bq/L	2.9 - 3.8Bq/L	no	erosion
URANIUM	30ppb	0	0.3ppb	0.3ppb	no	erosion

Some people must use special precautions

There are people who 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 microbial contaminants are available from the USEPA's Safe Drinking Water webpage www.epa.gov/safewater/sdwa or the EPA's Safe Drinking Water Hotline: 800-426-4791.

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 Facilities Engineering Systems Command (NAVFAC) at Europe Africa Central (EURAFCENT) Public Works Department (PWD) Redzikowo is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

There is no safe level of lead exposure. In drinking water, the primary source of lead is from pipes, which can present a risk to the health of children and adults. The U.S. Environmental Protection Agency (EPA) is committed to using every tool available to protect all Americans from lead in drinking water. EPA is developing a new proposed rule, the Lead and Copper Rule Improvements (LCRI) that will strengthen the Lead and Copper Rule (LCR). First promulgated in 1991, the LCR regulates lead and copper in public drinking water systems. 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. Lead swab testing on the distribution system did not find any lead present. 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.

Additional Information on PFAS

Has NSF Redzikowo tested its water for PFAS in 2023?

Yes. In July 2023 samples were collected from the Main Base distribution tank.

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.

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.

Is there a regulation for PFAS in drinking water?

On April 10, 2024, the US EPA established MCLs for a subset of PFAS chemicals. 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.

Points of Contact

NSF Redzikowo’s drinking water is overseen by the Installation Water Quality Board (IWQB). The IWQB is chaired by the installation commander and is composed of installation key stake holders. For more information, contact the Installation Environmental Program Director, Robert Blaesing, DSN 324-771-4335, robert.j.blaesing.civ@us.navy.mil; Installation Environmental Technician, Jędrzej Cichosz, DSN 324-771-4306, jędrzej.cicho.ctr.pl@eu.navy.mil; or Preventive Medicine, HM2 Kayla Frank kayla.n.frank.mil@health.mil

Abbreviations

Term	Definition
IWQB	Installation Water Quality Board – Chaired by the ICO. Members of the quarterly meeting include Public Works Officer, Environmental Program Director, Preventive Medicine and Operator in Responsible Charge for Treatment and Distribution.
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 bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).
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.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Public Health Goal (PHG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. More than 10 percent of tap water samples collected during any monitoring period was greater than

	0.015 mg/L for lead and 1.3 mg/L for copper.
Secondary Drinking Water Standards (SDWS)	MCLs are for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter ($\mu\text{g/L}$)
ppt	parts per trillion or nanograms per liter (ng/L)
ppq	parts per quadrillion or picogram per liter (pg/L)
pCi/L	picocuries per liter (a measure of radiation)