



NSF REDZIKOWO 2022 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?

Currently NSF Redzikowo consists of three treatment systems:

- 1) Main Base Drinking Water System(DWS);
- 2) Site Activation Area Facility(SAAF) (Temporary System);
- 3) Containerized Housing Unit(CHU) (Temporary System).

NSF Redzikowo provides treated groundwater supplied by two wells for the Main Base. The treatment system includes the following components:

- Sodium hypochlorite pre-chlorination;
- Multimedia filtration;
- Final disinfection with sodium hypochlorite.

The SAAF and CHU systems both utilize sodium hypochlorite disinfection. The water for both system is provided by the Wieszyno ground water utility line. The source for this utility line comes from two wells located approximately 1.6 miles south of NSF Redzikowo, near the Village of Wieszyno.

Water Quality Data Table

The following tables list all of the drinking water contaminants and relevant sampling data collected during the 2022 calendar year. Though this is the 2022 Consumer Confidence Report (CCR), this report also includes results from 2021. 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.

<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.
MCLG	MCLG: MCL 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.
NA	NA: Not Applicable

Table 1a. Main Base DWS Results

<u>Parameter</u>	<u>EPA/FGS MCL (ppm)</u>	<u>MCLG (ppm)</u>	<u>Your Water (ppm)</u>	<u>Sample Date</u>	<u>Typical Source</u>
Total Hardness	500	NA	200	DEC21	Erosion of natural deposits
Arsenic	0.01	0	0.00099	DEC21	Erosion of natural deposits
Boron	1	NA	0.33	DEC21	Erosion of natural deposits
Barium	2	2	0.157	DEC21	Erosion of natural deposits
Chromium	0.05	0.1	0.001	DEC21	Discharge from industrial processes
Iron	0.2	NA	0.028	DEC21	Erosion of natural deposits
Manganese	0.05	NA	0.0047	DEC21	Erosion of natural deposits
Sulfur	250	NA	21.6	DEC21	Erosion of natural deposits
Nickel	0.02	NA	0.00197	DEC21	Erosion of natural deposits
Sodium	200	NA	11.7	DEC21	Erosion of natural deposits
Antimony	0.005	0.006	0.00004	DEC21	Erosion of natural deposits
Glyphosphate	0.7	0.7	0.0005	DEC21	Runoff from herbicide use
Xylene (total)	10	10	0.007	DEC21	Discharge from petroleum factories;
Chloroform	0.03	NA	0.0138	FEB22	Disinfection by-product
Bromodichloromethane	0.015	NA	0.0076	FEB22	Disinfection by-product
Total Trihalomethanes (TTHMs)	0.08	NA	0.0231	FEB22	Disinfection by-product

Table 1b. Main Base Lead and Copper

<u>Parameter</u>	<u>EPA/FGS AL</u>	<u>MCLG</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Typical Source</u>
Copper – action level at consumer taps	1.3	1.3	1.16	JUL22	Corrosion of household plumbing system
Lead - action level at consumer taps	0.015	0	0.0038	JUL22	Corrosion of household plumbing system

Table 2a. Site Activation Area

<u>Parameter</u>	<u>EPA/FGS MCL (ppm)</u>	<u>MCLG</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Typical Source</u>
TTHMs	0.080	NA	0.0175	FEB22	Disinfection by-product
Chloroform	0.03	NA	0.0138	FEB22	Disinfection by-product
Bromodichloromethane	0.015	NA	0.0037	FEB22	Disinfection by-product
Haloacetic Acids (HAA5)	0.06	NA	0.011	FEB22	Disinfection by-product

Table 2b. Site Activation Area Lead and Copper

<u>Parameter</u>	<u>EPA/FGS AL (ppm)</u>	<u>MCLG</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Typical Source</u>
Copper – action level at consumer taps	1.3	1.3	0.0142	JAN22	Corrosion of household plumbing systems.
Lead – action level at consumer taps	0.015	0	0.0003	JAN22	Corrosion of household plumbing systems.

Table 3a. Containerized Housing Unit

<u>Parameter</u>	<u>EPA/FGS MCL (ppm)</u>	<u>MCLG</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Typical Source</u>
TTHMs	0.080	NA	0.0133	FEB22	Disinfection by-product
Chloroform	0.03	NA	0.0101	FEB22	Disinfection by-product
Bromodichloromethane	0.015	NA	0.0032	FEB22	Disinfection by-product

Table 3b. Containerized Housing Unit

<u>Parameter</u>	<u>EPA/FGS AL (ppm)</u>	<u>MCLG</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Typical Source</u>
Copper – action level at consumer taps	1.3	1.3	0.0195	JAN22	Corrosion of household plumbing systems.
Lead - action level at consumer taps	0.015	0	0.0005	JAN22	Corrosion of household plumbing systems.

VIOLATIONS, EXCEEDANCES, or MISSED SAMPLING EVENTS:

NSF Redzikowo had **NO** exceedances of the AL or MCL in 2022. However, the Water Quality Oversight Council (WQOC) Sanitary Survey Report (June 2023) identified several monitoring deficiencies that occurred in 2022. Specifically:

Main Base DWS

- The third-party drinking water quality compliance laboratory performed analyses for some regulated contaminants using methods for which it was not WQOC approved, or using a subcontract laboratory that was not approved by the WQOC.
- Total coliforms: No coliform monitoring data was provided for January 2022.
- Disinfection Byproducts (DBPs) were not monitored during the warmest month of the year.
- Lead and Copper: The number of locations sampled during each 6-month period does not meet the required number of sites for routine monitoring.
- Radionuclides: Four consecutive quarters of radionuclide monitoring have not been conducted.

SAAF and CHU Temporary Systems

- The third-party drinking water quality compliance laboratory performed analyses for some regulated contaminants using methods for which it was not WQOC approved, or using a subcontract laboratory that was not approved by the WQOC.
- Total coliforms: No coliform monitoring data was provided for January 2022.
- DBPs were not monitored during the warmest month of the year.
- Lead and Copper: The number of locations sampled during each 6-month period does not meet the required number of sites for routine monitoring.
- Radionuclides: Four consecutive quarters of radionuclide monitoring have not been conducted.
- Pesticides: Four consecutive quarters of pesticides monitoring have not been conducted.
- Volatile Organic Compounds (VOC's): Four consecutive quarters of VOC monitoring have not been conducted.
- Inorganic Chemicals: Only eight out of 26 regulated inorganic chemicals have been analyzed.

Public Works Department has addressed all the monitoring violations at the Main Base, SAAF and CHU. The Laboratory has been notified and will use the WQOC authorized laboratories and methods.

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, Jedrzej, DSN 324-771-4306, jedrzej.cicho.ctr.pl@eu.navy.mil; or Preventive Medicine, HMC Woodruff, DSN 324-771-4199, matthew.woodruff@eu.navy.mil.

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 for Arsenic

Arsenic is odorless and tasteless. It enters drinking water supplies from natural deposits in the earth or from agricultural and industrial practices. People who over a period of many years drink water contaminated with arsenic in excess of the drinking water standards could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer. Information on Arsenic in drinking water is available at <https://www.epa.gov/dwreginfo/arsenic-and-your-distribution-system>.