

# 2024 Water Quality Report for NSF Redzikowo

This report covers the 2024 calendar year drinking water quality for NSF Redzikowo, Containerized Housing Unit (CHU) Drinking Water System (DWS). This information is a snapshot of the quality of the water that we provided to you in 2024. Included are details about where your water comes from and what it contains. The Maximum Contamination Levels are based on the Final Governing Standard (FGS) Poland and DoDM 4715.05: Overseas Environmental Baseline Guidance Documents (OEBGD).

The water at the CHU comes from the Polish municipal system that supplies water to the town of Redzikowo. The source water for the municipal system is extracted from two wells located approximately 2.5 km (1.6 miles) south of NSF Redzikowo near the Village of Wieszyno. According to the municipal operators, the wells are 100 m (330 ft) and 95 m (310 ft) deep and produce approximately 50 m<sup>3</sup>/h (220 gpm) and 30 m<sup>3</sup>/h (130 gpm), respectively. Water from the wells is treated via filtration at a municipal water treatment plant. No treatment chemicals (i.e., chlorine) are added to the filtered water until it reaches the CHU Drinking Water Treatment. There are no significant sources of contamination in the municipal water supply.

If you would like to know more about this report, please contact: Jędrzej "NJ" Cichosz at Public Works Department, or call 597-714-306.

**Contaminants and their presence in 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 U.S. Environmental Protection Agency EPA Safe Drinking Water Hotline (800-426-4791).

**Vulnerability of sub-populations:** 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 systems 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. U.S. EPA and the 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 (800-426-4791).

**Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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:**

- **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 stormwater 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 and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **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 stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

## Water Quality Data

The table on the following page lists all the drinking water contaminants that we detected during the 2024 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done **January 1 through December 31, 2024**.

### Terms and abbreviations used below:

- 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 allow for a margin of safety.
- Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- N/A: Not applicable
- ND: not detectable at testing limit
- ppm: parts per million or milligrams per liter
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment: 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.
- FGS: Final Governing Standard Poland November 2020
- OEBGD - DODMANUAL 4715.05 Overseas Environmental Baseline Guidance Documents, June 2020
- EPA: Environmental Protection Agency
- CDC: Center for Disease Control

## Monitoring Data for Regulated Contaminants

FGS Poland Regulated Contaminant	MCL, TT, or MRDL (FGS Poland)	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Nitrate (ppm)	10	10	0.052	N/A	2024	No	Primary sources of organic nitrates include human sewage and livestock manure, especially from feedlots. The primary inorganic nitrates which may contaminate drinking water are potassium nitrate and ammonium nitrate both of which are widely used as fertilizers.
Toluene (ppm)	1	1	0.08	N/A	2024	No	Industrial activities, including petroleum refining and discharge from industrial plants. Leaking underground storage tanks, especially at gasoline stations, and improper waste disposal also contribute to toluene contamination.
Total Trihalomethanes (TTHMs) (ppm)	0.08	N/A	No detection	N/A	2024	No <sup>2</sup>	Byproduct of drinking water disinfection
Chlorine <sup>1</sup> (ppm)	4	4	0.79	0.42-1,24	2024	No	Water additive used to control microbes

<sup>1</sup> The chlorine “Level Detected” was calculated using a running annual average.

<sup>2</sup> TTHMs has been tested by the Wessling Laboratory – the authorization letter for that laboratory has been pending at a time. Due to a sampling mistake, the FGS regulated TTHMs bromoform and dibromochloromethane, was not tested in 2024. Though there was a discrepancy in the testing process of TTHM in 2024, there were no previous exceedances in 2022, or 2023.

## Monitoring Data for Regulated Contaminants – Lead and Copper

Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water <sup>3</sup>	Range of Results	Year Sampled	Number of Samples Above AL <sup>4</sup>	Violation Yes/No	Typical Source of Contaminant
Lead (ppm)	0.01	0	0.0012	0.0002-0.0023	2024	1	Yes	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.51	0.0032-0.0111	2024	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>3</sup>The value is the average based on the results of 3 rounds of sampling at 5 locations at CHU distribution system.

<sup>4</sup>Ninety (90) percent of the Lead samples collected, exceeded the level reported for our water. Lead detected at CHU#85 at 0.0261 ppm following resampling during two consecutive quarters showed no detection. The public notification has been released as required on 11SEP24.

**Information about Health Effects of lead in Drinking Water:**

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. Public Works Department (PWD) 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<sup>6</sup>.

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 wish to have your water tested, contact PWD Environmental Jędrzej "NJ" Cichosz at 597-714-306 . 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>

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

**Lead Service Line Inventory**

The Lead Service Line Inventory for a CHU Distribution System was completed by PWD in 2024. There is no lead pipes in this system. If you would like to see a copy of final report contact: PWD, Environmental Jędrzej "NJ" Cichosz at desk phone number 597-714-306.

**Corrective Actions**

Since there were errors in the results, we have conducted 4 quarterly consecutive sampling for lead. No detection has confirmed that it was most likely laboratory error. The corrective actions included the investigation on Lead and Copper sampling procedures as well as checks on the fixtures. Drinking Water Operators didn't identified any lead fixtures or lead materials in the faucet. Lead detection could be caused by the sampling practice errors. The pre-stagnation flushing has not been applied and first-draw cold water sample from a tap stood in the pipes for longer than 18 hours.

Due to our TTHM sampling error, we will resample for TTHMs upcoming quarter (JULY-SEP 2025). BOSC has confirmed they will use the authorized laboratory and follow the Drinking Water Sampling Plan.

***A copy of this CCR and previous year reports are available at:***

***<https://cnreurfcent.cninavy.mil/Operations-and-Management/Water-Quality-Information/>***