

**YEAR 2023 ANNUAL DRINKING WATER QUALITY REPORT
NORTH EAST TOWNSHIP WATER DEPARTMENT
PUBLIC WATER SUPPLY IDENTIFICATION NO. 6250086**

Purpose of this report:

The PA Department of Environmental Protection (PA DEP) adopted regulations requiring public water suppliers to provide an Annual Drinking Water Quality Report to its consumers.

Pursuant to these regulations, we are presenting our Annual Drinking Water Quality Report. This report provides information on last year's (2023) water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

North East Township purchases all of its public water from North East Borough. The purchased water is conveyed to all users within a Township owned, operated, and maintained distribution system.

Spanish (Español) Statement:

Spanish Statement – Este informe contiene información muy importante sobre su agua beber. Traduzcalo o hable con alguien que to entienda bien.

Translation – This report contains important information about your drinking water. Translate it or speak with someone who understands it.

Where does my water come from?

The North East Township Water Department is operated by North East Township, and receives its water from North East Borough Water Authority which serves an average demand of 1.8 million gallons of drinking water per day to 4,601 borough residents, and approximately 4,152 residents in North East Township. The sources for North East Borough lie within two separate major watersheds. Their current water sources consist of Lake Erie, a spring, and three impoundment reservoirs (Smith Reservoir, Grahamville Reservoir and Eaton Reservoir). Eaton Reservoir is located in the East Branch French Creek Watershed, which is part of the larger Ohio River System. Smith and Grahamville Reservoirs are located in the Sixteen Mile Creek Watershed, which drains directly into Lake Erie. These basins are located in the larger Great Lakes Region. The Lake Erie drainage area contains more the 270,000 square miles of land and water. The watershed spans several physiographic provinces; and therefore, flows through a variety of topographic features consisting of several stream patterns. The sources permitted a maximum withdrawal of 7.5 million gallons per day. At present, about 98% of our water comes from Lake Erie and the other 2% from the reservoirs and spring.

What future improvements are planned?

The North East Borough Water Department and Township are continuing to plan for improvements to the water treatment plant and distribution system. Within the water treatment plant, the Borough's future projects include a new laboratory, upgrades to their filters and SCADA (Supervisory Control and Data Acquisition) monitoring programs, rehabilitation of the raw water storage basins, improved security at the treatment plant, as well as new and more accurate flow meters on our finished water supply. The completion of these projects will allow for improved monitoring of the water quality and quantity, leaving the water treatment plant and ensuring the highest quality of water is being delivered to all customers. They are also working closely with an engineering firm to extend our finished reservoir supply by an additional four million gallons. In the distribution system, the Borough is planning to replace all cast iron water mains with ductile iron mains, bringing both improved water quality and fire protection for the residents in these areas. The Borough also plans to install generators at both the Freeport Pump Station and the Route 20 Pump Station. Finally, Freeport pump station will be getting three new pumps to increase pumping capacity.

HEALTH EFFECTS AND ADDITIONAL INFORMATION

While our water is safe for the vast majority of our customers, 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 from their health care providers as to the safety of the drinking water for their particular condition. 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 Water Drinking Hotline (800-426-4791).

What are the Sources of Contaminants?

The sources of drinking water (both tap water and bottled water) can 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 animal or human activity.

Contaminants that may be present in source water could include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or 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 agricultural, urban storm water runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

In order to ensure that tap water is safe for consumption, EPA prescribes regulations which limit the amounts of certain contaminants in water that is provided by public water systems and we treat our water according to these EPA's regulations. Similarly, Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Protecting Your Drinking Water Supply:

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Properly dispose of pharmaceuticals, household chemicals, oils and paints. Material can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag. Check with the local refuse facility for proper disposal.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Take part in watershed activities.

Report any spills, illegal dumping or suspicious activity to the Pennsylvania DEP:
www.dep.pa.gov/About/ReportanIncident/Pages/EnvironmentalComplaints.aspx

Both the Borough's and the Township's priority is to provide reliable, quality drinking water service for customers. The source of supply water is an important part of that mission and both work to understand and reduce potential risks to your drinking water supply. On May 9, 2019, North East Borough Water Department was given a certificate of approval of our new Source Water Protection Plan under the Pennsylvania Source Water Protection Technical Assistance Program (SWPTAP). This is a voluntary program to identify and address potential threats to drinking water supplies. The Pennsylvania Department of Environmental Protection recognizes the outstanding efforts of the Borough in developing an approved source water protection program. Implementation of this program exemplifies a strong commitment to source water protection and providing safe drinking water to its customers.

Information about 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. Both the North East Borough and Township Water Departments are 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 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 Safe Drinking Water Hotline at (800-426-4791) or <http://www.epa.gov/safewater/lead>.

The utility-owned water mains are not made of lead; however, the water service line that carries the water from the water main in the street to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel, or plastic. Homes built before 1930 are more likely to have lead plumbing systems. There are different ways that you can determine if you have a lead service line.

- You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve.
- A licensed and insured plumber can inspect your pipes and plumbing.
- Lead test kits can be purchased at local hardware and home improvement stores. These kits are used to test paint but can also be used to test pipe – not the water inside. Look for an EPA recognized kit. Wash your hands after inspecting plumbing and pipes.

Please note if your service lines contain lead, it does not mean you cannot use water as you normally do. The North East Borough and Township Water Departments regularly tests for lead in drinking water and our water meets state and federal water quality regulations, including those set for lead.

You cannot see, smell, or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing:

- **Flush your taps.** The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to two minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plant.
- **Use cold water for drinking and cooking.** Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.
- **Routinely remove and clean all faucet aerators.**
- **Lead for the "Lead Free" label** when replacing or installing plumbing fixtures.
- **Follow manufacturer's instructions for replacing water filters** in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.
- **Flush after plumbing changes.** Changes to your service line, meter, or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for three to five minutes.

Information About Fluoride.

Fluoride is a naturally occurring substance. It can be present in drinking water from two sources:

1. By nature, when ground water comes into contact with fluoride-containing minerals naturally present in the earth.
2. By a water purveyor through the addition of fluoride to the water they are providing in the distribution system.

The North East Borough Water Department does add fluoride to your water supply. Naturally occurring fluoride levels are typically at or below 0.4 ppm. EPA has set the amount of fluoride to 0.7 ppm to achieve an optimal fluoride level and prevent tooth decay. Pennsylvania's current maximum drinking water standard is 2.0 ppm.

Information About Cryptosporidium.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they can cause disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, and abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Information About Nitrates.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Information About PFAS.

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products including nonstick cookware (e.g., Teflon™), stain repellants (e.g., Scotchgard™) and waterproofing (e.g., GORE-TEX™). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluoro octane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluoro butane sulfonic acid (PFBS) and others.

Recently, Pennsylvania Department of Environmental Protection finalized drinking water standards for PFOA and PFOS. On January 14, 2023, changes to PA Code 25, Chapter 109 were published in the Pennsylvania Bulletin establishing MCLs and monitoring requirements for PFAS. The regulation sets a maximum contaminant level of 14 ppt for PFOA, and 18 ppt for PFOS. Initial required monitoring will begin January 2024.

How can I get involved or obtain more information?

The public is welcome to attend our regularly scheduled monthly meetings. The Township meets on the first Monday of the Month at 7:30 p.m. and the third Monday of the month at 9:00 a.m. The Township Water and Sewer Authority meets on the fourth Monday of the month at 7:00 p.m. (when necessary).

If you have any questions about this report or your water service, please contact the **North East Township Office, 10300 West Main Road, P.O. Box 249, North East, PA 16428, (814) 725-8606; FAX (814) 725-2419; email: snewara@northeasttp.org**

WATER QUALITY DATA TABLE

The North East Borough Water Department and the Township continuously monitors for contamination in your drinking water according to federal and state laws. The following table lists all the drinking water contaminants that we detected during the calendar year of this report. The presence of 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 in the calendar year of the report. The Federal (EPA) or the State (DEP) requires us to monitor for certain contaminants less than once per year because the concentration of these contaminants does not change frequently.

Definition of Terms: These are terms that may appear in your report.

Action Level (AL): the concentration of a contaminant, which, if exceeded, trigger treatment or other requirements that a water system must follow.

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.

LRAA: Locational Running Annual Average

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

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 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MFL: Million fibers per liter.

NA: Not applicable.

ND: Not detected. Laboratory analysis indicates that the contaminant is not present at a detectable level.

Nephelometric Turbidity Units (NTU): Measure of the clarity, or turbidity, of the water.

pH: A Measurement of acidity, 7.0 being neutral.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles)

parts per million (ppm): One part substance per million parts water or milligrams per liter. Comparable to 1 drop in a 10-gallon fish tank.

parts per billion (ppb): One part substance per billion parts water or micrograms per liter. Comparable to one drop in a 10,000-gallon swimming pool.

parts per trillion (ppt): One part substance per trillion parts water or nanograms per liter. Comparable to 1 drop in 20 junior size Olympic (660,000 gallon) pools.

Secondary Maximum contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

TON: Threshold Odor Number

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

%: Percent

Water Quality Results

The North East Borough Water Department and the Township conduct extensive monitoring to determine if your water meets all water quality standards. The results from both the Borough and Township’s monitoring are reported in the following tables. While most monitoring was conducted in 2023, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the “Definition of Terms” on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

Revised Total Coliform Rule – At least 5 samples collected each month in the distribution system (6 collected in July and September)						
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Percentage of Highest Number of Positive Samples	Typical Source
Total Coliform ¹	2023	Yes	0	TT = Less than 5% positive monthly samples	0	Naturally present in the environment
>>>> NET Samples	2023	Yes	0	TT = Less than 5% positive monthly samples	0	Naturally present in the environment
E. coli ²	2023	Yes	0	MCL = No confirmed samples	0	Naturally present in the environment
>>>> NET Samples	2023	Yes	0	TT = Less than 5% positive monthly samples	0	Naturally present in the environment

Note: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of water. We are reporting the highest percentage of positive samples in any month.

1 – The Treatment Technique for Total Coliforms requires that if the number of total coliform positive samples exceed 1, a system assessment must be conducted, any sanitary defects identified, and correct actions completed. Addition Level 1 Assessments are required depending on the circumstances.

2 – The Treatment Technique for E. coli requires that for any total coliform positive routine sample with one or more total coliform positive check samples and an E. coli positive result for any of the samples a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed. The E. coli MCL is exceeded if routine and routine samples are total coliform positive and either is E. Coli positive, or the system fails to take repeat samples following an E. coli positive routine sample, or the system fails to analyze total coliform positive repeat samples for E. coli.

Disinfection Byproduct – Collected in the Distribution System							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest LRAA	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2023	Yes	NA	80	52.1	27.9-55.9	By-product of drinking water disinfection
>>>>NET Samples	2023	Yes	NA	80	75.5	35.2-127	By-product of drinking water disinfection
Halo acetic Acids (HAAs) (ppb)	2023	Yes	NA	60	30.3	14.8-32.9	By-product of drinking water disinfection.
>>>>NET Samples	2023	Yes	NA	60	29.6	17.7-30.3	By-product of drinking water disinfection

Note: Compliance is based on the running annual average at each location (LRAA). The highest LRAA reflects the highest average at any location and the range detected reflects all samples used to calculate the running annual average.

Disinfectants – Collected at the Treatment Plant and in the Distribution System								
Substance (with units)	Year Sampled	Compliance Achieved	MRDGL	MRDL	Minimum Required Chlorine Residual	Compliance Result	Range Detected	Typical Source
Entry Point Chlorine Residual (ppm) ¹	2023	Yes	4	4	0.20	1.11	1.11-1.90	Water additive used to control microbes.
Distribution System Chlorine Residual (ppm) ²	2023	Yes	4	4	0.20	1.56	1.09-1.56	Water additive used to control microbes.
>>>>NET Samples	2023	Yes	4	4	0.20	1.32	0.73-1.32	Water additive used to control microbes0

1 – Result represents the lowest residual entering the distribution system from the surface water treatment plant.

2 – Result represents the highest monthly average of chlorine residuals measured throughout the distribution system.

Lead and Copper Rule

The Borough and Township were approved for reduced monitoring. Samples are now taken every three years. Results are from 2022 with the next scheduled sampling period in 2025. The Borough and Township sampled for copper and lead at twenty (20) locations and ten (10) locations, respectively, during 2022, and a synopsis those results is reported below.

Contaminants (units)	MCL	MCLG	Number of Sites above Action Level	90 th Percentile Value	Violation	Typical Source(s) of Contamination
Lead (ppb)	AL=15	0	0 of 27	< 2.0	No	Corrosion of household plumbing.
>>NET Samples	AL=15	0	1 of 10	<2.5	No	Corrosion of household plumbing.
Copper (ppm)	AL=1.3	1.3	0 of 27	0.12	No	Corrosion of household plumbing.
>>NET Samples	AL=1.3	1.3	0 of 10	0.2	No	Corrosion of household plumbing.

Disinfection By-Products Precursor Removal – Collected at the Treatment Plant								
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Range of % Removal Required	Range of % Removal Achieved	Number of Quarters Out of Compliance	Typical Source
Total Organic Carbon (ppm) ¹	2023	Yes	NA	TT	25%	27.67-39.44	0	Naturally present in the environment.

1-Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and halo acetic acids (HAAs). Drinking water containing these byproducts that exceed the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Turbidity – Continuous monitoring at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Single Measurement. % of Samples ≤0.3 NTU.	Sample Date of Highest Compliance Result	Typical Source
Turbidity (NTU)	2023	Yes	0	TT: Single result > 1 NTU	.061	11/23/2023	Soil runoff.
	2023	Yes	NA	TT: At least 95% of samples ≤0.3 NTU	100%	NA	Soil runoff.

Other Regulated Substances – Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL/SMCL	Highest Compliance Result	Range Detected	Typical Source
Glyphosate (ppm)	2023	Yes	0.7	0.7	ND	Single Sample	Runoff from herbicide use in crop or non-crop applications.
Barium (ppm)	2023	Yes	2.0	2.0	0.023	0.0201 -0.023	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Dalapon (ppm)	2023	Yes	0.2	0.2	0.001	ND – 0.001	Runoff from herbicide use in crop or non-crop applications.
Benzo(a)pyrene (ppm)	2023	Yes	0	0.0002	0.000022	ND – 0.000022	Contamination of surface water or groundwater, or by leaching from water storage tanks and distribution lines.
Fluoride (ppm)	2023	Yes	2	2	0.79	0.06 – 0.79	Naturally- occurring elemental metal; largely used in aluminum alloy production. Essential dietary trace nutrient
Nitrate (ppm)	2023	Yes	10	10	<0.10	Single Sample	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.

1 – Substances with Secondary MCLs do not have MCLGs; these limits are primarily established to address aesthetic concerns.

Other Substances of Interest – Collected at the Treatment Plant			
Substance (with units)	Year Sampled	Average Result	Comments
pH	2023	7.82	pH is a measure of the acid/base properties of water.
Total Hardness (mg/L)	2023	122	Naturally occurring in the environment.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

ESTE INFORME CONTIENE INFORMACIÓN MUY IMPORTANTE SOBRE SU AGUA DE BEBER. HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

The Township and Borough Water Departments are required to monitor your drinking water for specific contaminants on a regular basis. During the second quarter Township and Borough Water Departments of 2023, there was a detection of two of our SOC samples collected (Dapax and Benzo(a)pyrene). Although a detection, they were still below our maximum contamination level regulations set forth by Pennsylvania Department of Environmental Protection. But because of the detection, our sampling schedule for these SOC's went from triennially to quarterly. This information was misunderstood and because of this, the fourth quarter sampling for 2023 was missed. Although this was not an emergency and no action needed to be taken by our customers as far as alternative water sources or boiling of water, you have the right to know what occurred. The new sampling frequency is now on our schedule and we consider the problem resolved.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.