2024 Annual Water Quality Report

NEW OXFORD MUNICIPAL AUTHORITY
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THIS REPORT CONTAINS IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Este informe contiene informacion muy importante sobre su agua potable.
Traduzcalo o hable con alguien que lo entienda bien.

For More Information about Your Water:

New Oxford Municipal Authority Board Meetings
4th Tuesday of every other Month
Meetings @ 1:00 PM
Meeting Location at Authority Office:
409 Water Works Road, New Oxford PA 17350-1511
Contact Person:
Adam R Winters, Facilities Manager
(717) 624 - 9399

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Consumer Confidence Report Rule

In 1996, Congress Amended the Safe Drinking Water Act, adding a provision that requires all community water systems to deliver to their customers a brief annual water quality report. Final regulations were promulgated by EPA in 1998, known as the Consumer Confidence Report Rule, which established the requirements for these annual water quality reports. The deadline for distribution of the annual report is July 1st of every year for the preceding calendar year.

Safety of Drinking Water

Some people may be more vulnerable to drinking water contaminants than the general population. Immuno-compromised persons, such as people 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 guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from EPA's Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater.

NOMA Sources of Water

The water system, owned and operated by the New Oxford Municipal Authority (NOMA), is permitted under the Pennsylvania Safe Drinking Water Act and is identified as PWS ID No. 7010025. The drinking water is drawn from the South Branch Conewago Creek, which is classified as a surface water source. As water travels over the surface of the land, it dissolves naturally occurring minerals and radioactive material and may pick up substances resulting from the presence of animals or from human activity. NOMA maintains four finished water storage tanks Two storage tanks, with a capacity of 1,500,000 gallons each are located at the water treatment facility. An elevated storage tank with a capacity of 200,000 gallons is located on East Golden Lane. The Oxen County Meadows Well 001 is a groundwater source and includes a storage tank with a capacity of 387,000 gallons. This groundwater source can supply 144,000 gallons per day to the public. NOMA also has an emergency interconnect with the York Water Company which can supply 576,000 gallons per day to NOMA customers on an on needed basis.

Treatment of Drinking 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at (800) 426-4791 or by visiting EPA's website at **www.epa.gov/safewater**. Surface water withdrawn from the South Branch Conewago Creek is treated at NOMA's Water Treatment Facility using conventional filtration. Treatment chemicals added include: activated carbon, DelPAC, chlorine and permanganate. The Oxen Country Meadows Well is a groundwater source and only requires chlorine addition. Chemical addition is necessary for organics and solids removal, disinfection, taste and odor control and neutralization. Disinfection is necessary to inactivate microorganisms which are naturally present in the environment. The treated water is pumped to the storage tanks prior to distribution to customers.

Common Contaminants in Water

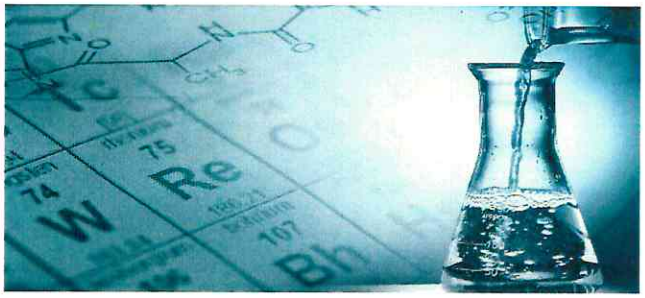
Contaminants that may be present in the source water include:

- ► 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 storm runoff, industrial or domestic wastewater discharges, 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 which may also come from gas stations, urban storm water runoff and septic systems.
- ► Radioactive contaminants which can be naturally occurring or be the result of mining activities.

In order to ensure that tap water is safe to drink, EPA establishes regulations which limit the amount of certain contaminants in water provided by public water systems.

Source Water Protection Plan (SWPP)

The New Oxford Municipal Authority has been working in conjunction with DEP and the engineering firm of Spotts, Stevens and McCoy over the past few years to develop a Source Water Protection Plan for NOMA's water intake on the South Branch Conewago Creek. The purpose of the SWP Plan is to determine potential sources of pollution that may impact public water supplies and the appropriate measures to be taken to protect such water supplies. The core assessment issues of the South Branch Conewago Creek Watershed include contamination from agricultural activities, urban runoff and industrial point sources. The SWPP was finalized and approved by DEP as of July 2019.



Contaminants Detected in Your Water

The New Oxford Municipal Authority (NOMA) is pleased to report that the water you drink has complied with all Federal and State drinking water standards during 2024. However, even with the best water treatment, it is not always possible to remove all contaminants. Earth and rock act as natural filters and remove many of these contaminants. NOMA tested for approximately 95 different contaminants the past 5 years. Not all of theses contaminants are required to be tested every year. Contaminants tested but not detected include the following: Arsenic, Antimony, Barium, Beryllium, Cadmium, Chromium, E. Coli, Free Cyanide, Mercury, Nickel, Nitrite, Selenium, Thallium, Total Coliform and 20 Volatile Organic Contaminants.

Perfluorooctanoic Acid's (PFOA) and Perfluorooctane Sulfonate's (PFOS)

What are they and how do they impact Drinking Water?

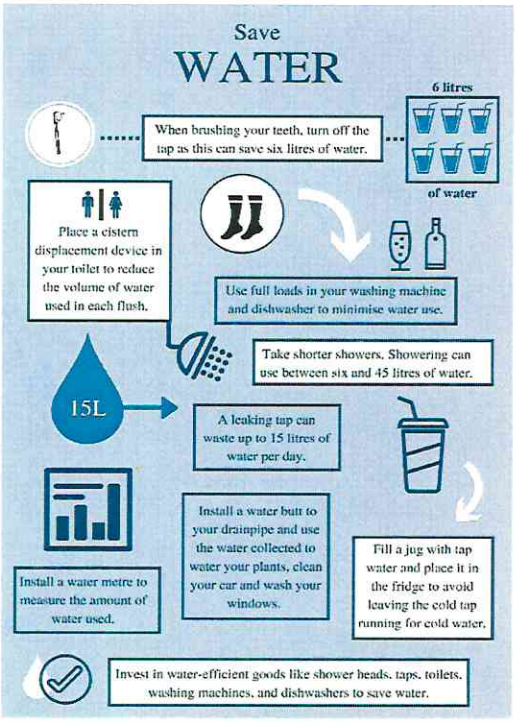
PFOA (perfluorooctanoic acid) and PFOS (perfluorooctane sulfonate) are part of a larger group of chemicals called per- and polyfluoroalkyl substances (PFAS). These chemicals are known as "forever chemicals" because they persist in the environment and do not break down naturally. PFAS are used in various products to make them stain-resistant, non-stick, or fire-resistant, including cookware, food packaging, firefighting foam, and clothing. People can be exposed to PFAS through contaminated drinking water, consuming food packaged in PFAS-containing materials, or handling products containing PFAS. PFAS can contaminate soil and water, including drinking water sources, through industrial manufacturing and disposal of PFAS-containing products.

Health Risks

Exposure to PFAS has been linked to various health effects, including developmental problems, reproductive issues, and increased risk of certain cancers. The EPA and other agencies are actively researching the potential health risks associated with PFAS exposure. Children and individuals with pre-existing health conditions may be more vulnerable to the effects of PFAS exposure

Monitoring

On January 14, 2023, the PFAS MCL Rule was published in the Pennsylvania Bulletin, setting maximum contaminant levels (MCLs) for PFOA and PFOS in drinking water. The rule sets an MCL of 14 parts per trillion (ppt) for PFOA and an MCL of 18 ppt for PFOS. These limits were set to protect public health and minimize the risk associated with PFOA and PFOS in drinking water. You will find the analytical results from the New Oxford Municpal Authority's public drinking water in the tables below. NOMA is pleased to report that all analytical results were well below the maximum contaminant levels (MCLs) set by the Department of Environmental Protection Agency.



Water Conservation Tips

Bathroom - where over half of ALL water use inside a house takes place:

◊ Do not let the water run while shaving or brushing teeth.
◊ Take short showers instead of tub baths. Turn off the water while soaping and shampooing.
◊ If you must use tub, close the drain before turning on the water and fill the tub only half full.
◊ Bathe small children together.
◊ Never use your toilet as a waste bucket.

Kitchen and Laundry - simple practices that save a lot of water:

◊ Keep drinking water in refrigerator instead of letting the faucet run until the water is cool.
◊ Wash fruits and vegetables in a basin. Use a vegetable brush.
◊ Do not use water to defrost frozen foods; thaw in the refrigerator overnight.
◊ Scrap, rather than rinse, dishes before loading into the dishwasher; wash only full loads.
◊ Add food wastes to your compost pile instead of using garbage disposal.
◊ Wash only full loads of laundry or use the appropriate water level or load size selection on the washing machine.

Definitions of Terms

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

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's 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 disinfectant residual, in this case for Chlorine that is allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant residual in drinking water, in this case Chlorine, below which there is no known or expected risk to health.

Minimum Residual Disinfectant Level (Min. RDL): The minimum level of residual disinfectant required at the entry point to the distribution system.

Nephelometric Turbidity Unit (NTU): Measure of turbidity which is the clarity of water.

Parts per Billion (ppb): Unit of concentration equivalent to micrograms per Liter (ug/L).

Parts per Million (ppm): Unit of concentration equivalent to milligrams per Liter (mg/L).

Picocuries per Liter (pCi/L): Measure of radiation.

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

NEW OXFORD MUNICIPAL AUTHORITY

Violation Notice				
The New Oxford Municipal Authority is pleased to announce they have met all Federal and State Drinking Water Regulations for the calendar year of 2024.				
Table of Contaminants				
Contaminants	**MCL**	**MCLG**	**Test Value[1]**	**Major Source in Drinking Water**
Microbiological Contaminants				
Turbidity[2] Source ID 101	Minimum 95 % < 0.3 NTU Maximum = 1.0 NTU	NA[3]	TT: Minimum 100 % Maximum = 0.14 NTU	Soil Runoff.
Microbial Contaminants				
Total Coliform Bacteria Distribution	* For systems that collect < 40 samples/month * More than 1 positive monthly sample	0	No Violation	Naturally present in the environment.
Inorganic Contaminants				
Fluoride Source ID 101	2.0 ppm	2.0 ppm	Maximum 0.0 ppm	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Nitrate Source ID 101	10.0 ppm	10.0 ppm	Result: 2.76 ppm	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks and sewage.
Nickel Source ID 101	NA[3]	NA[3]	Result: 0.001 ppm	Nickel is a naturally occurring metal that can leach into water from nickel-plated plumbing.
Combined Uranium Source ID 101	20.0 pCi/L	NA	Result: 0.67 pCi/L (2023)	Erosion of natural deposits.
Barium Source ID 101	2.0 ppm	2.0 ppm	Result: 0.027 ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Lead and Copper Rule				
Copper Distribution	AL = 1.3 ppm	1.3 ppm	90th percentile: 0.072 ppm Maximum: 0.091 ppm 0 in 40 samples exceeded the action level (2022)	Corrosion of household plumbing systems. Erosion of natural deposits.
Lead Distribution	AL = 15 ppb	0 ppb	90th percentile: 0.002 ppb Maximum: 0.004 ppb 0 in 40 samples exceeded the action level (2022)	Corrosion of household plumbing systems. Erosion of natural deposits.

Table of Contaminants

Perfluorooctanoic Acid (PFOA) and Perfluorooctance Sulfonate (PFOS)				
PFOA Source ID 101	14.0 ppt	NA[3]	Average: 2.4 ppt Range: 2.0 - 2.7 ppt	Known as "forever chemicals" in the environment and do not break down naturally.
PFOS Source ID 101	18.0 ppt	NA[3]	Average: 1.2 ppt Range: 0.0 - 2.4 ppt	Known as "forever chemicals" in the environment and do not break down naturally.

[1] Pennsylvania DEP allows public water systems to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Some of the data on this table, though representative, may be more than one year old. In these cases, the calendar year in which the water samples were tested for these contaminants are shown in parenthesis.

[2] Turbidity is a measure of cloudiness of the water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

[3] NA represents Not Applicable.

Contaminants	MCL	MCLG	Test Value[1]	Major Source in Drinking Water
Disinfectant Byproducts (DPBs), Precursors and Disinfectant Residuals				
Free Chlorine Distribution	MRDL = 4.0 ppm	MRDLG = 4.0 ppm	Range: 0.77 - 1.05 ppm	Water additives used to control microbes.
HAA_5[3] Distribution	60 ppb	NA[2]	Maximum: 39.5 ppb Range: 20.0 - 39.5 ppb	Byproduct of drinking water chlorination.
TTHM[4] Distribution	80 ppb	NA	Maximum: 74.8 ppb Range: 24.5 - 74.8 ppb	Byproduct of drinking water chlorination.
TOC[5] Raw Source	NA	NA	Average: 2.4 ppm Range: 2.1 - 2.7 ppm	Naturally present in the environment.
TOC - CFE[6] Source ID 101	TT: < 2.0 ppm Minimum 15 % Removal	NA	RAA[7]: 1.6 ppm Avg. Removal: 33.5 % Range: 23.8% - 40.9%	Naturally present in the environment.
Surface Water Treatment Rule (SWTR)				
Free Chlorine Source ID 101	Min. RDL = 0.2 ppm	NA	Range: 0.55 - 1.49 ppm	Water additives used to control microbes.
Groundwater Treatment Rule (GWTR)				
Free Chlorine Source ID 102	Min. RDL = 0.4 ppm	NA	Range: 0.40 - 1.36 ppm	Water additives used to control microbes.
Nitrate Source ID 102	10.0 ppm	10.0 ppm	Result: 2.84 ppm	Erosion of natural deposits.
Barium Source ID 102	2.0 ppm	2.0 ppm	Result: 0.061 ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Gross Alpha Source ID 102	15.0 pCi/L	NA	Maximum: 4.62 pCi/L Range: 0.00 - 4.62 pCi/L Annual Average: 2.04 pCi/L (2020)	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Combined Uranium Source ID 102	20.0 pCi/L	NA	Maximum: 1.62 pCi/L Range: 1.23 - 1.62 pCi/L Annual Average: 1.41 pCi/L (2020)	Erosion of natural deposits.

Table of Contaminants				
Perfluorooctanoic Acid (PFOA) and Perfluorooctance Sulfonate (PFOS)				
PFOA Source ID 102	14.0 ppt	NA[3]	Average: 2.4 ppt Range: 2.0 - 2.8 ppt	Known as "forever chemicals" in the environment and do not break down naturally.
PFOS Source ID 102	18.0 ppt	NA[3]	Average: 4.5 ppt Range: 3.3 - 5.3 ppt	Known as "forever chemicals" in the environment and do not break down naturally.

[1] Pennsylvania DEP allows public water systems to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Some of the data on this table, though representative, may be more than one year old. In these cases, the calendar year in which the water samples were tested for these contaminants are shown in parenthesis.

[2] NA represents Not Applicable.

[3] HAA_5 represents Total Haloacetic Acids.

[4] TTHM represents Total Trihalomethanes.

[5] TOC represents Total Organic Carbon.

[6] CFE represents Combined Filter Effluent.

[7] RAA represents Running Annual Average.

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. NOMA is responsible for providing high quality drinking water, but cannot control the variety of material 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** or at http://www.epa.gov/safewater/lead.

New Oxford Municipal Authority Board Members

Chairman: John Spalding	Term Expires: January 4th, 2026
Vice Chairman: James Eisenhart	Term Expires: January 14th, 2030
Secretary: Donald Kline	Term Expires: January 2nd, 2029
Treasurer: David Moul	Term Expires: January 3rd, 2027
Personnel: Scott Racey	Term Expires: January 2nd, 2028