Annual Drinking Water Quality Report

2021

NEWMANSTOWN WATER AUTHORITY

PWSID #7380028

We are pleased to present you with our twenty-fourth Annual *Drinking Water Quality Report*. This *Report* is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources.

SOURCES OF WATER

All of our water supply is pumped from two deep groundwater wells. Both of the wells are located in Millcreek Township. We have not used surface water from the Gold Stream since 1993.

Need More Information?

If you have a question about this Report or concerning your water utility, please contact:

> John Kantner Chairman (610) 589-1754

Written comments or correspondence also can be sent to the Authority at our mailing address or by email. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the last Monday of each month at 7:00 p.m. at the Authority office, 30 Avenue A., Newmanstown. Written requests for our public records must be submitted to the attention of Chairman John Kantner at our mailing address. Refer to the following website:

newmanstownwaterauthority.org for more information.

We look forward to continuing to serve the residents and businesses of our community.

Newmanstown Water Authority PO Box 247 Newmanstown PA 17073 Phone: (610) 589-1754 Fax: (610) 589-4046 Email: newmanstownwaterauthority@gmail.com Last year, we provided our 1,034 customers with a little more than 42 million gallons of water, or approximately 116,000 gallons per day on average. Our drinking water again met all federal and state requirements.

In 2007, the Authority finalized the upgrade of the water distribution system which eliminated all lead piping. Since December 2016, the Authority is debt-free, having made at that time the final payment on the loan taken out the for the 2007 water system upgrade and improvement project. Specific activities in 2021 included:

- Monthly meetings well held "in-person" despite the virus pandemic, with some Board Members' participating by phone.
- Discussions with Richland and the Womelsdorf-Robesonia Joint Authority (WRJA) regarding a proposed mutually beneficial inter-municipal water system improvement project, that would have resulted in our Authority's acquiring the current WRJA customers along North Sheridan Road, ended when the Borough decided it was not interested in the proposed project.
- We renewed our right to withdraw groundwater with the Delaware River Basin Commission.
- Work was completed on the creation of our own web-site.
- We reviewed plans for several projects, including the duplex on West Park Street and the townhouses at 322 West Main Street. No further communication was received regarding the potential Cold Summit project.
- We entered into an agreement with PennDOT for the replacement of several water services and some water main in West Main Street as part of the State's proposed repaying project, with the State's covering 75% of the Authority's cost.
- We increased several fees, including our tapping fee; but the quarterly user rates remained unchanged.
- We honored Peter Shirk for the construction of significant improvements to our water system, including developing a new well, constructing a new storage tank, and constructing a new 12" transmission main, as part of the Newberg Village project.

As noted above, we have our own web-site: newmanstownwaterauthority.org. Our Rules and Regulations (last updated in Oct 2020) are posted there. You can now pay your quarterly water bill on our website. Go to the "Pay Your Bill" tab and click on the pay.xpress-pay.com link.

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Rates for Residential Meters

Since December 2016, the Authority is debt-free, having made at that time the final payment on the loan taken out the for the 2007 water system upgrade and improvement project.

As reported in previous years' reports, new quarterly charges went into effect September 1, 2019.

Notes:

 A customer with a 1/2" service line is assessed the same minimum charge as a customer with a 5/8" service line.
"Service Line Rates" shall be substituted for "Meter Rates". The Minimum Charge is assessed on the basis of the service line size, not the size of the meter.

(3) There is a \$1.00 per quarter charge for hydrant maintenance.

(4) There is a \$2.00 per quarter charge for the PA DEP Safe Drinking Water Annual fee.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Das Bericht hot wichdich Sache tzu saage wege eire Drinkwasser.

Know the Health Risks

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man-made. All 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426- 4791 or visiting the EPA Office of Water website at www.epa.gov/OGWDW. MCLs are set at very stringent levels for health effects.

To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

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. 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 services lines and home plumbing. The Authority is responsible for providing high quality drinking water, but we 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 or at <u>http://www.epa.gov/safewater/lead</u>.

Sources of drinking water (both tap water and bottled water) 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 the presence of animals or 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, urban stormwater 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 stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.



Impurities Detected by the Newmanstown Water Authority

The Newmanstown Water Authority routinely monitors for constituents in your drinking water according to federal and state laws. This table shows monitoring results for the period of January 1 to December 31, 2021. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act.

This table shows <u>only</u> the contaminants that were detected and the levels at which they were detected. There were <u>many</u> other contaminants that were not

detected in the samples collected for analysis. Remember that the presence of certain constituents does not necessarily pose a health risk. All drinking water may be reasonably expected to contain at least small amounts of some constituents.

In 2021, as shown in the Table, our system had no exceedances. We're proud that our drinking water quality meets or exceeds Federal and State requirements. In February, the Chlorine residual was not reported in a timely manner. In October, the results for Haloacetic Acids and Trihalomethanes were not reported correctly. These issues have since been resolved with DEP and the Authority is in full compliance.

| 0 - mt - mt | Highest Level | | NWA Highest | | NWA Range of E | | EPA MCLG | | Violation |
|----------------------------|------------------------|-------------------------|--------------------------|-----------------|----------------------------|---------------------|-------------|--|-------------|
| Contaminant | Allowed (MCL) | | Detected Value | | Detected Values | | (EPA Goal) | Sources of Contamination | Y or N |
| | | | Disinfect | ant/Disinfect | tion By-Produ | cts (9/2 | 021) | | |
| Trihalomethanes (TTHMs) | 80 | ug/L | 34.8 ug/L | | 13.3 - 34.8 ug/L | | N/A ug/L | By-product of drinking water chlorination | N |
| Haloacetic Acids (HAAs) | 60 ug/L | | 8.9 ug/L | | 3.3 - 8.9 ug/L | | N/A ug/L | By-product of drinking water disinfection | N |
| Bromodichloromethane (THM) | N/A ug/L | | 4.9 ug/L | | 3.4 - 4.9 ug/L | | N/A ug/L | By-product of drinking water chlorination | N |
| Chloroform (THM) | N/A ug/L | | 28.2 ug/L | | 8.6 - 28.2 ug/L | | N/A ug/L | By-product of drinking water chlorination | N |
| Chlorodibromomethane (THM) | N/A ug/L | | 1.7 ug/L | | 1.3 - 1.7 ug/L | | N/A ug/L | By-product of drinking water chlorination | N |
| Dichloroacetic Acid | N/A ug/L | | 7 ug/L | | 3 - 7 ug/L | | N/A ug/L | By-product of drinking water chlorination | N |
| Trichloroacetic Acid | N// | \ug/L | 2 ug/L | | ND - 2 ug/L | | N/A ug/L | By-product of drinking water chlorination | N |
| | | | I | norganic Ch | emicals (10/20 | 21) | | | |
| Nitrate (mg/L) | | 10 | 1.49 | | 1.49 | | 10 | Geology, farmland runoff, septic tanks, sewage | Ν |
| | | | Rad | diological Co | ntaminants (1 | /2021) | | | |
| Gross Alpha | 15 pCi/l | | 3.7 pCi/l | | 3.7 pCi/l | | 0 pCi/l | Erosion of natural deposits | Ν |
| Radium-(226 & 228) | 5 pCi/l | | 2.65 pCi/l | | 2.65 pCi/l | | 0 pCi/l | Erosion of natural deposits | Ν |
| | | | Dis | stribution Dis | infectant Res | idual | | | |
| Chlorine (mg/L) | MRDL = 4 | | 1.40 | | 0.96 - 1.40 | | MRDLG = 4 | Water additive used to control microbes | N |
| | | | Er | try Point Dis | infectant Res | idual | | | |
| Contaminant | Location ID | Minimum Disinfectant | Lowest Level Detected | Range of | Detections | Units | Sample Date | Sources of Contamination | Violation N |
| Chlorine (mg/L) | 103 | 0.4 | 0.88 | 0.88 | - 1.64 | ppm | 7/26/2021 | Water additive used to control microbes | N |
| | | • | L | ead and Cop | per Rule ¹ (9/2 | 019) | | | |
| | NWA Range of | | 90th Percentile | Action EPA MCLG | | # of Sites Above AL | | | Violation |
| Contaminant | Detected Values | | Value | Level (AL) | L) (EPA Goal) | | Total Sites | Sources of Contamination | Y or N |
| Copper (mg/L) | 0.045 - 0. 1 37 | | 0.135 | 1.3 | 1.3 1.3 | | 0 of 10 | Pipes, geology, wood preservatives | Ν |
| Lead (ug/L) | ND - 2 | | 2 | 15 | 0 | | 0 of 10 | Corrosion of old pipes, geology | Ν |

* The PA DEP allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Items not sampled for in 2021 are noted with the last year of sampling.

1. The Action Level (AL) for Lead and Copper serves as a trigger for water systems to take additional treatmment steps if exceeded in more than 10% of tap water samples. The Action Level for Lead is 15 ug/L, and the Action Level for Copper is 1.3 mg/L. No Action Levels were exceeded in the 2019 sampling.

Definitions

In the tables in this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL - Maximum Contaminant Level

The "Maximum Allowed" is 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.

mg/l - Milligrams per liter or Parts per million (ppm)

One milligram per liter or one part per million (ppm) corresponds to one minute in two years or a single penny in \$10,000.

MCLG - Maximum Contaminant Level Goal

The "Goal" is 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.

MRDL - Maximum Residual Disinfectant Level

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.

MRDLG - Maximum Residual Disinfectant Level Goal

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 contamination.

pCi/l - Picocuries per liter

Picocuries per liter is a measure of the radioactivity in water.

ug/l - Micrograms per liter

One microgram per liter corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.



Source Water Protection

The *Source Water Assessment*, which was completed by the PA DEP, for our Authority, the Womelsdorf-Robesonia Joint Authority (WRJA) and the Borough of Richland continues to be implemented. **Our goal is to reduce the possibility of contaminants entering our water supply sources.** Protecting our wells is a critical element to delivering a safe and reliable supply of drinking water to our customers. Source water protection not only benefits the water supply, but ultimately the economic, social, and environmental well-being of our community. Several point and non-point potential sources of contamination (PSOC) were identified in the preparation of the plan. The Assessment found that our sources are potentially most susceptible to agricultural activities, but overall, the Authority's wellhead protection area has a low risk of contamination. The Authority continues to work with the farmers to minimize spreading manure near its well.



Undetected Impurities Tested for by Newmanstown Water Authority (PWSID #7380028)

Inorganic Chemicals Antimony Arsenic Asbestos (2012) Barium Beryllium Cadmium Chromium Cyanide (Free) Fluoride Mercury Nickel Nitrite Selenium Thallium

Synthetic Organic Chemicals (2020) Alachlor Atrazine Methoxychlor 27 Other SOC's

Disinfection By-Products

Bromoform (THM) Monochloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid 1,1,2-Trichloroethane 1,1-Dichloroethylene 1.2.4-Trichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,4-Dichlorobenzene Benzene Carbon tetrachloride Chlorobenzene cis-1,2-Dichloroethylene Dichloromethane Ethylbenzene Styrene Tetrachloroethylene Toluene trans-1,2-Dichloroethylene Trichloroethylene Vinyl chloride Xylenes (Total)

Volatile Organic Chemicals (2020)

1.1.1-Trichloroethane

Microbiological Contaminants Total Coliforms

Radiologicals Combined Uranium

Note: Not all contaminants are sampled for every year, according to DEP regulations. Those contaminants that were not sampled for in 2021 are noted with the last month and year of sampling.