

2023 WATER QUALITY REPORT



MUNICIPAL AUTHORITY OF THE
CITY OF NEW KENSINGTON

PWS ID#: PA5650070

CONTINUING OUR COMMITMENT

The Municipal Authority of the City of New Kensington is once again proud to present to you our annual water quality report. This edition covers testing completed for the 2023 calendar year. We are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

WORKING HARD FOR YOU

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (USEPA) is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports to the USEPA if they were detected in the drinking water. USEPA uses these data to ensure that consumers are receiving clean water.

This publication conforms to the regulation under SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

For more information about this report, or for any questions relating to your drinking water, please call the Plant Superintendent at (724) 335-8595, between 8 a.m. and 4 p.m., Monday through Friday.

COMMUNITY PARTICIPATION

We encourage public interest and participation in our community's decisions affecting drinking water. You are invited to participate in our regular board meetings and voice your concerns about your drinking water. The board meets the 2nd Monday of every month beginning at 7:00 p.m. at the Municipal Authority of the City of New Kensington Office, 920 Barnes Street, New Kensington, Pennsylvania. These meetings are advertised in the Valley News Dispatch.

SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC (Centers for Disease Control and Prevention) 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).

SUBSTANCES EXPECTED TO BE IN DRINKING WATER

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the amount 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 must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.



The 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 can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

OTHER SUBSTANCES

In addition to the required testing, monitoring for total organic carbon in river and finished drinking water samples were performed during the year. The Municipal Authority continues to monitor for particles similar in size to Giardia and Cryptosporidium. This particle counting helps to maximize particle removal efficiency.

HOW IS MY WATER TREATED AND PURIFIED?

The treatment process consists of a series of steps. First, raw water is drawn from the Allegheny River and goes to a mixing chamber where potassium permanganate, powdered carbon, polyaluminum chloride and lime are added. The addition of these substances causes small particles to adhere to one another (called 'floc') making them heavy enough to settle into a basin from which sediment is removed. Chlorine is then added for disinfection. Ammonium Sulfate is added during warmer months to combine with the chlorine. This helps to prevent the formation of chlorine byproducts and the loss of chlorine residual as water passes through the distribution piping. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller, suspended particles are removed, turbidity disappears, and clear water emerges. Chlorine is added again at this point as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, caustic soda (used to adjust the final pH and alkalinity), fluoride (used to prevent tooth decay) and a corrosion inhibitor (used to protect distribution system pipes) are added before the water is pumped to sanitized storage reservoirs, water towers and into your home or business.



SAMPLING RESULTS

During the past year, we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.



Regulated Substances

Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low- High	Violation	Typical Source
Barium¹ (ppm)	2023	2	2	0.030	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine/Chloramines² (ppm)	2023	[4]	[4]	1.07	0.01-2.00	No	Water additive used to control microbes
Fluoride³ (ppm)	2023	4	4	0.63	0.5-0.8	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate⁴ (ppm)	2023	10	10	1.02	NA	No	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits
Haloacetic Acids (HAAs)⁵ (ppb)	2023	60	NA	46.3	15.6-58.4	No	By-product of drinking water disinfection
TTHM's [Total Trihalomethanes]⁶ (ppb)	2023	80	0	42.9	19.0-66.4	No	By-product of drinking water disinfection
Total Organic Carbon⁷ (ppm)	2023	TT	NA	1.6	1.0-2.3	No	Naturally present in the environment
Turbidity⁸ (NTU)	2023	TT	NA	0.23	0.05-.23	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT	NA	100	NA	No	Soil runoff

Lead and Copper (Tap water samples were collected from 30 homes in the service area)

Substance (Units)	Year Sampled	Action Level	MCLG	Amount Detected (90th%tile)	Homes Above Action Level	Violation	Typical Source
Copper⁹ (ppm)	2022	1.3	1.3	0.042	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead⁹ (ppb)	2022	15	0	<2.5	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹ Some people who drink water containing barium in excess of the MCL over many years could experience an increase in blood pressure.

² The amount reported is the monthly average of distribution samples. More than 50 samples are collected each month. Chloramines are used for disinfection when source water temperatures are above 50 degrees F.

³ The amount detected is the annual average. The fluoride content is measured on a daily basis. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

⁴ Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

⁵ Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. The detected level denotes the maximum locational running annual average of quarterly distribution samples.

⁶ Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer. The detected level denotes the maximum locational running annual average of quarterly distribution samples.

⁷ The amount reported is the average of twelve monthly samples. Total organic carbon monitoring and removal is a treatment technique used to help reduce the amount of chlorine by-products formed in the distribution system.

⁸ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

⁹ Of the samples tested for copper, 90% were at or below 0.030 ppm.

⁹ Of the samples tested for lead, 90% were below 2.5 ppb. An informational packet about lead in drinking water is available at our main office. Infants and children who drink water containing lead in excess of the Action Level over many years could develop kidney problems or high blood pressure.

TABLE DEFINITIONS

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

MRDL (Maximum Residual Disinfectant Level)

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.

MCL (Maximum Contaminant Level)

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.

MCLG (Maximum Contaminant Level 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: Not applicable.

ND: Not detected.

TT (Treatment Technique):

A required process intended to reduce the level of a contaminant in drinking water.

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

NTU (Nephelometric Turbidity Units):

Measurement of the clarity, or turbidity, of water.

NE: No MCL or MCLG established



WATER CONSERVATION TIPS

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions:

Conservation measures you can use inside your home include:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car and save the hose for rinsing.

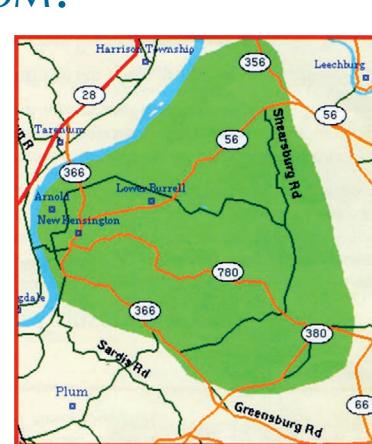
Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/publicoutreach/index.html.

WHERE DOES MY WATER COME FROM?

The Municipal Authority of the City of New Kensington customers are fortunate because we enjoy an abundant supply of surface water from the Allegheny River. The Harold Burns Smith Water Treatment Plant draws water from the Allegheny River, which carries more than one billion gallons of water per day. The H. Burns Smith Water Treatment Plant was constructed around 1912 with major renovations occurring in 1957 and 1994 to draw from this water supply. This river is constantly being replenished from various reservoirs to our north, including the following: Kinzua Dam and Allegheny Reservoir, Tionesta Lake, East Branch Clarion River Lake, Mahoning Creek Lake, Crooked Creek Lake, Conemaugh River Lake, Loyalhanna Lake, along with underground sources and numerous small creeks and springs. Altogether, our treatment facility provides roughly 1.8 billion gallons of clean drinking water every year.

A Source Water Assessment Report was completed in March of 2002 for our water supply. The greatest potential threats to the Municipal Authority's water supply are from: Storm water and CSO runoff from industrial and commercial areas, cropland and golf courses adjacent to the river carrying pesticide and herbicide contaminants, and possibly sanitary sewage. Accidental release of known or unknown contaminants along the major transportation and pipeline corridors. Cumulative impact of heavy metal discharge from the industrial and power plants and the potential for accidental releases of large quantities of a variety of substances from the power plant and its surrounding facilities. Cumulative release of petroleum products from a number of marinas along the river and the potential for accidental spills. A copy of this report is available for review at our main office.

A Source Water Protection Plan was updated in March 2023. The objective of this project is to develop a source water protection plan that delineates the protection areas for the Lower Allegheny water sources, determines the transport times and pathways of potential contaminants, identifies potential sources of contamination, and offer strategies to protect the water sources from contamination. A copy of this report is available for review at our main office.



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