



CITY OF KENT

Division of Water

2023 DRINKING WATER CONSUMER CONFIDENCE REPORT

The City of Kent remains committed to providing our residents with a safe and reliable supply of the highest-quality drinking water. We continue to test our water using sophisticated equipment and advanced procedures. In 2023, we had an unconditional license (OH6701812) to operate our water system. The City of Kent water meets all state and federal standards for appearance and safety. As a matter of record, all City of Kent Water Plant Operators possess Ohio EPA Operator Certification. In addition, three personnel are Ohio EPA certified to do bacteria testing. This annual "Consumer Confidence Report," required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, what our tests show about it, and other things you should know about drinking water.

We proudly report that the water provided by the City of Kent continues to “meet or exceed” all established water-quality standards.

We encourage public interest and participation in our community's decisions affecting your drinking water. Regular City Council Meetings are held on the 1st and 3rd Wednesday of each month, at 320 South Depeyster Street, in the Kent Council Chambers at 7:30 p.m. We invite and welcome the public to these meetings.

Overview

The year 2023 was very successful. Wellfield maintenance and equipment replacements were the highlights of the year. The rehabilitation of an old well was completed in June of 2023. This will assist with redundancy in the wellfield while other wells are having maintenance performed on them. Test drillings were completed in Fall 2023 with favorable results for new wells. Adding more wells

to the City of Kent's raw water supply will be necessary in the coming years.

We had our fair share of issues and emergencies arise, but like always, our employees were able to respond promptly, and we were able to maintain water service to the City of Kent residents consistently. The continued dedication and hard work of our employees is greatly appreciated.

There were no operational deviations from the State or Federal EPA. We look forward to continue serving Kent with the world's best potable water.

Water Source Information

The City of Kent is supplied by groundwater, pumped from several wells close to the Water Plant. Our wellfield is known as the "Breakneck Creek Wellfield," which taps into the "Buried Valley Aquifer." The exception is Well No. 13. It is considered a rock well, as it taps into a water-bearing sandstone formation. The high-quality well water is first delivered to your Water Plant, where it is treated. The treatment includes softening, filtration, stabilization (to prevent it from being corrosive), disinfection, and fluoridation for your benefit.

Ohio EPA completed a study of the City of Kent's source of drinking water to identify potential contaminant sources and provide guidance on protecting the drinking water source. This assessment indicates that the Kent City PWS's source of drinking water has a high susceptibility to contamination because 1) The sand and gravel aquifer has a shallow depth to water, less than 15 feet below the ground surface, 2) The topography is relatively flat, and the soils are loams and sandy loams, allowing for a moderate to significant

amount of precipitation to infiltrate into the ground instead of running off 3) No confining layer exists in many areas, which could act as a barrier between the ground surface and the aquifer. 4) Potential significant contaminant sources exist within the protection area. This susceptibility means that under current existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. The City of Kent has proactively monitored and protected this precious resource.

The City of Kent also has an emergency connection with the City of Ravenna. During 2023 we used 917,000 gallons from this connection over three days. On average, this connection is used for approximately one or two days each year. This report does not contain information on the water quality received from the City of Ravenna, but a copy of their consumer confidence report can be obtained by contacting Amy Wilson (330)296-2741.

Water Quality Data

The following table lists the only drinking water contaminants that were found during or prior to the 2023 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. It is important to understand that the treatment process our water under goes, makes it far safer than most water supplies anywhere in the world. Unless otherwise noted, the data presented in this table is from testing performed between January 1st through December 31st, 2023. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

How to Read This Table

It's easy! Our water is tested to assure that it is safe and healthy. The column marked "Level Found" shows the highest test results during the year. A "Source of Contaminant" shows where this substance usually originates. Footnotes explain important details. Columns headed MCL, AL, and MCLG refer to:

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

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which, there is no known or expected risk to health. MCLG's allow for a margin of safety.

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

The data presented in this report is from the most recent testing done in accordance with regulations.

We have performed testing for many different potential contaminants, but only the listed substances were found. Of those substances that were found, all are below the MCL limit. We also collected 360 routine samples for bacteriological examination throughout the city during the year of 2023. We are pleased to report that each of these samples were negative (no bacteria present).

Contaminant	Sample Year	Unit	MCL or MRDL	MCLG or MRDLG	Level Found	Range of Detections	Sources of Contaminants	Violation
Inorganic Contaminants								
Fluoride	2023	ppm	4	4	1.01	0.54-1.06	Erosion from natural deposits, additive in water which promotes strong teeth, discharge from fertilizer and aluminum factories	NO
Disinfection Byproducts								
Total Trihalomethanes TTHMs	2023	ppb	80	N/A	52.45	27.4-61	By-Product of drinking water chlorination	NO
Haloacetic Acids HAA5	2023	ppb	60	N/A	11.25	0-15.7	By-Product of drinking water chlorination	NO
Residual Disinfectants								
Total Chlorine	2023	ppm	4	4	1.22	1.09 – 1.37	Water Additive to control Microbes.	NO

Lead and Copper								
Contaminant	2023	Unit	Action level (AL)	MCLG	Individual Results over the AL	90% of test levels were less than	Sources of Contaminants	Violation
Lead	2023	ppb	AL = 15	0	0	0	Corrosion of household plumbing systems	NO
	0 out of 0 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper	2023	ppm	AL=1.3	1.3	0	0.014	Corrosion of household plumbing systems	NO
	0 out of 0 samples were found to have copper levels in excess of the lead action level of 1.3 ppm.							

Key to Table

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

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

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 residual disinfectant below which there is no known or expected risk to health.*

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.*

pci/l = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/l): *Parts per Million (ppm) are units of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.*

ppb = parts per billion, or micrograms per liter (µg/l): *Parts per Billion (ppb) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.*

The “<” symbol: *A symbol which means ‘less than’. A result of “<5” means that the lowest level detected was below 5 and the contaminant in that sample was not detected.*

Disinfection By-Products

Disinfection byproducts are the results of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.

TTHM's Health Effects

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 increased risk of getting cancer.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Additional Water Quality Monitoring

Our water system participates in the Ambient Ground Water Monitoring Program, which is administered by the Ohio EPA's Division of Drinking and Ground Waters. As a result, our ground water source is subjected to additional extensive analysis every six to eighteen months. While this analysis is not used to fulfill our monitoring requirements, it does provide us with additional assurance of the quality of our source water.

Additional Information That May Be Of Interest:

Chemical Analysis (Annual Average 2023)

	Raw Water (untreated)	Tap Water (treated)
Alkalinity	219 mg/l	47 mg/l
Hardness	311 mg/l	91 mg/l
Non-Carbonate	92 mg/l	43 mg/l
Calcium (as Ca)	94 mg/l	17 mg/l
Magnesium (Mg)	18 mg/l	12 mg/l
Fluoride	0.13 mg/l	0.95 mg/l
P.H.	7.35	9.24

Sources of Contamination in Drinking Water and Additional Health Information

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Source Water Protection

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 dissolves naturally occurring minerals and 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff and septic systems.

(E) 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 to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

If you have any questions or would like additional information on the Source Water Protection report, please get in touch with John Ellison-Water Plant Manager at the Kent Water Treatment Plant at (330)-676-7220

Lead in Drinking Water

“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. The City of Kent is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting several hours, you can minimize the potential for lead exposure by flushing your tap from 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about the 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 at <http://www.epa.gov/safewater/lead>.”

Special Information Available

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune disorders, some elderly people, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate ways to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Additional Questions?

In addition to the testing that we are required to perform, our water system voluntarily tests for hundreds of additional substances and microscopic organisms to make certain our water is safe and of high quality. For more information, call the City of Kent at (330) 676-6333. We are here to serve **YOU!** Please feel free to contact us with any questions that you may have.

Significant Deficiencies

We were informed by the Ohio EPA that a significant deficiency in the 400,000-gallon ground storage tank had been identified on January 24th 2023. We are implementing a corrective action plan which is to rehabilitate the storage tank contingent on the approval of OPWC funding, and the latest anticipated completion date is 4/1/2026 by as prescribed by the Ohio EPA.

The significant deficiencies identified in the Ohio EPA report are listed below.

b. The following deficiencies require attention to protect from structural failure and to upgrade the facility to meet current design standards. Please have a professional company address the following deficiencies identified in the inspection report:

- i. Replacement of 10 anchor bolt nuts.*
- ii. Abrasive blast and clean the interior ceiling, rafters, compression ring and plate edges to inspect for steel loss to determine if repairs are needed.*
- iii. Remove internal overflow piping and install an external overflow that terminates onto a concrete splash pad with a screen, which creates a proper visible air gap discharge.*
- iv. Exterior roof coating identified in fair condition, small, isolated areas of coating delaminating.*
- v. Exterior shell coating identified in poor condition, numerous large areas of coating delaminating to underlying coats and prime coat.*
- vi. Interior roof coating identified in poor condition with, extensive and substantial corrosion degradation taking place along the circular rafter compression ring.*

We were informed by the Ohio EPA that a significant deficiency in the 500,000-gallon pedosphere tank had been identified on January 24th 2023. We are implementing a corrective action plan which is to rehabilitate the storage tank contingent on the approval of OPWC funding, and the latest anticipated completion date is 4/1/2026 by as prescribed by the Ohio EPA.

The significant deficiencies identified in the Ohio EPA report are listed below.

b. The following deficiencies require attention to protect from structural failure and to upgrade the facility to meet current design standards. Please have a professional company address the following deficiencies identified in the inspection report:

- i. The tank is vented through four 11-inch by 6-inch openings cut through the top of the access tube which is venting the tank through the dry interior without the required screening. Recommend welding plates over these openings and installing a 24-inch freeze proof type roof vent.*
- ii. Access tube ladder is almost completely corroded through along the side rail. Corroded section of the side rail should be replaced.*
- iii. Repair access holes cut in the floors of both dry interior stem landings.*
- iv. Exterior upper ball roof coating identified in poor condition.*
- v. Exterior shell /ball coating identified in poor condition.*
- vi. Interior upper ball roof coating identified in poor condition. Moderate to extensive corrosion areas present throughout rafters, circular compression rafter ring and roof plate edges.*
- vii. Interior pedestal access tube coating identified in poor condition, including access tube ladder and pedestal shaft, and base plate.*

We were informed by the Ohio EPA that a significant deficiency in storage of the chlorine cylinders had been identified on January 24th 2023 We are implementing a corrective action plan which is to investigate a solution to store all chlorine cylinders inside the chlorine room, and the latest anticipated completion date is 12/31/2029 as prescribed by the Ohio EPA. As of this writing the City of Kent and Ohio EPA are actively working on a solution to this significant deficiency.

The significant deficiencies identified in the Ohio EPA report are listed below.

- a. The extra chlorine cylinder that is not in use at the plant is stored in the loading dock outside of the chlorine room. The cylinder is covered by a roof but otherwise exposed to outdoor conditions.*
- b. Per Ohio EPA detail plan approval on November 16, 1973, "Storage space for 18 containers (1-ton cylinders) will be provided on the loading dock next to the chlorine room." The current operation/method of storage for the 1-ton cylinders is in accordance with the 1973 approval. However, this operation/method is an unacceptable risk to the health of the operators and surrounding public.*

We were informed by the Ohio EPA that a significant deficiency in 2,000,000 gallon water storage tank had been identified on January 24th 2023 We are implementing a corrective action plan which is to cover the entire vent pipe on top of the storage tank with a mesh screen, and the latest anticipated completion date is 6/1/2024 as prescribed by the Ohio EPA.

The significant deficiencies identified in the Ohio EPA report are listed below.

- a. The screen is necessary on the vent to prevent the entrance of birds, creatures, and large debris from entering the water chamber of the tank. Without a screen, there is a sanitary risk to the water inside the tank.*