

City of Reading 2024 Annual Water Report

City of Reading
Water Department
PO Box 240
Reading, MI 49274

POSTAL CUSTOMER
READING, MICHIGAN

Postal
Customer
Reading, MI

Definitions and Abbreviations

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 Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water and is enforceable.

Maximum Residual Disinfectant Level (MRDL):

The highest level of disinfectant allowed in drinking water. The addition of a disinfectant is necessary for control of microbial contaminants.

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

Highest Level Detected: This column usually represents the highest result measured. For turbidity, it is the highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits for the filtration technology being used. For Disinfectant By-Products, it is the highest running annual average.

ND: Not detectable within testing limits

N/A: Not applicable

ppm: Parts per million or milligrams per liter-or one ounce in 7,350 gallons of water

ppb: Parts per billion or micrograms per liter-or one ounce in 7,350,000 gallons of water

ppt: parts per trillion or nanograms per liter

pCi/l: picocuries per liter (a measure of radioactivity)

Action Level (AL): A level of contaminant that if exceeded, treatment may be required.

Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system

Level 2 Assessment: A detailed study of the water system to identify potential problems and determine why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions



Introduction

The City of Reading has developed and distributed this water quality report as part of our continued effort to provide our water customers with educational information regarding your drinking water supply. This report also demonstrates that your drinking water supply is safe by meeting or exceeding all water quality standards listed in the Safe Drinking Water Act (SDWA).

The United States Environmental Protection Agency (USEPA) and the Michigan Department of Environment Great Lakes & Energy (MIEGLE) continually monitor all drinking water utilities to comply with SDWA regulations. As required by Consumer Confidence Report (CCR) regulations of the recently amended SDWA, a water quality report will be distributed to all water customers by July 1st of each year.

During the past year, The City of Reading Water Department has taken hundreds of water samples to determine the presence of any biological, inorganic, volatile organic, or synthetic organic contaminants.

No drinking water violations were recorded during 2024 for the City of Reading. All monitoring and reporting requirements were met.

We want our valued customers to be informed about their water quality and safety. If you have any questions or comments regarding this report or our water supply system, please contact Paul Seegert, Reading, Drinking Water Operator-In-Charge, at (517) 283-2835. The Reading City Council meets once a month at 6:30 p.m. in the Council Chambers at Reading City Hall. This report is available on the website at: <http://www.reading.mi.us>.

City of Reading Consumer Confidence Report Water Quality Report for 2024

*“Este Informe contiene informacion muy importante sobre su agua de beber.
Si desea entender este reporte puede buscar alguien que lo traduzca para ud.”*

Drinking-Water Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. Contaminants do not necessarily indicate that water poses a health risk. More information about these contaminants and potential health effects can be obtained by calling USEPA's Safe Drinking Water Hotline (800) 426-4791.

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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to reduce infection risk by microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (800) 426-4791.



To ensure that tap water is safe to drink, the USEPA sets regulations that limit the number of certain contaminants in water provided by public water systems. The food and Drug Administration (FDA) regulates limits for contaminants in bottled water, which must provide the same protections for public health.

Source Water Contaminants

To ensure that tap water is safe, the USEPA prescribes regulations limiting the number of certain contaminants in public water systems. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. These contaminants do not necessarily indicate that the water poses a health risk. The USFDA establishes limits on bottled water, which must provide the same protections for public health.

As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, in some cases, radioactive material and substances resulting from the presence of animals or human activity. The drinking water sources (tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Substances that may be in source water include:

Microbial contaminants, for example, viruses and bacteria, may come from sewage treatment plants, septic systems, farming, livestock and wildlife.

Inorganic contaminants such as salts and metals, can naturally result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

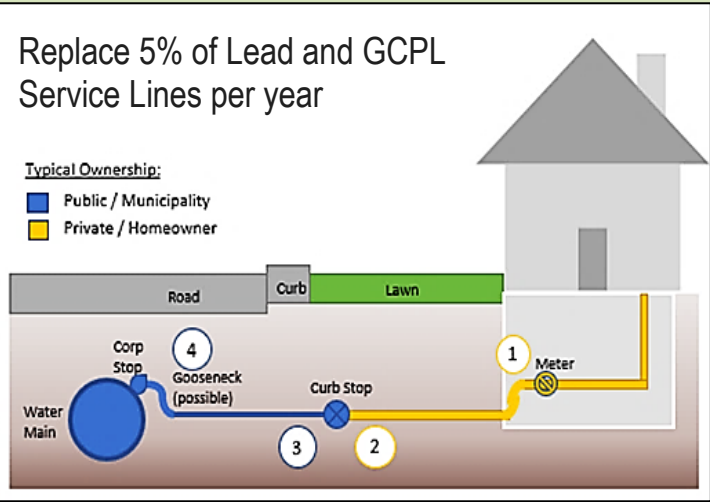
Pesticides and herbicides, may come from various sources for example, agricultural uses, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes, petroleum production, gas stations, urban stormwater runoff, and septic tank systems.

Radioactive contaminants can result from oil and gas production and mining and natural activities.

Source Water Location

The City of Reading relies on groundwater for its drinking water supply. The City owns and operates two (2) wells located 3 miles south of the community. The groundwater supply is a complex system composed of pumps, electronic instruments, and other appurtenances. Routine maintenance is performed on all equipment to ensure the reliability of the groundwater supply when it's needed, either in an emergency or as part of the seasonal supply. The municipal drinking water utilizes chlorine for disinfection; the drinking water is then pumped to the 100,000-gallon elevated storage tank water tower for public use.



Lead information: Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Reading is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water and wish to have your water tested, contact RDPW 517.283.2604 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at: <https://www.epa.gov/safewater/lead>.

(2024) Water Quality Detected Contaminants for the City of Reading

City of Reading Lead and Copper Results – Collected at Customer's Tap in August 2024

Contaminant (Units)	Action Level	MCLG	Your Water ¹	Sites Above the AL	Range Detected (Low-High)	Testing Frequency	Violation (yes / no)	Typical Source of Contamination
Copper (ppm)	Action Level* (AL) 1.3 ppm	1.3	0.1	0	0 – 0.089 ppm	10 samples every three years	Violation 0 / No	Copper service lines, corrosion of household plumbing fittings and fixtures.
Lead (ppb) plumbing	Action Level** (AL) 15 ppb	0	3.0	0	0 – 5.1 ppb		0 / No	Lead service lines, corrosion of household plumbing; Erosion of natural deposits.

* Action Level for Copper – 90% of the homes tested must have levels less than 1.3 ppm detected.

**** Action Level for Lead – 90% of the homes tested must have levels less than 15 ppb detected.**

Note: Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Source Water Assessment Program

The MIEGLE provided us with a Source Water Assessment Report for our water supply. It determines the susceptibility or relative potential of contamination to our drinking water wells. The susceptibility rating for the City of Reading is listed as "moderate to high." The ratings are determined by geologic sensitivity, water chemistry, and potential contaminant sources located in the groundwater wells' areas. The source water assessment report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. This report helps us ensure that quality finished water is delivered to your homes.

Water Quality Data Table

According to Federal and State laws, the City of Reading routinely monitors for contaminants in your drinking water. The table below lists the drinking water contaminants that we detected during the calendar year of this report unless otherwise noted. The State of Michigan requires us to monitor certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, though representative, some of our data may be more than one year old. If any, violations and Formal Enforcement Actions are reported in the next section of this report.

2024 Water Quality Detected Contaminants for the City of Reading

Contaminant (Units)	MCLG, MRDL Reporting Limit	MCL or AL	Highest Level Detected	Range of Detections	Violation	Sample Date	Typical Source of Contaminant
City of Reading Inorganic Contaminants							
Arsenic (ppb)	0	10	1.7	<1.0 to 2.4	No	2024	Erosion of Natural deposits; Runoff from orchards & production wastes
City of Reading Regulated Chemicals and Contaminants							
Chlorine (ppm) (Month/Avg)	4	N/A	1.5	1.09 to 1.94	No	2024	Water additive used to control Microbes.
Fluoride (ppm)	*4	4	0.16	0.16	No	2024	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Nitrate / Nitrite (ppm)	*10 / 1	10 / 1	<0.020	N/D	No	2024	Fertilizer use runoff; Leaching from septic tanks, sewage; Erosion of natural deposits.
Total Coliform (total positive samples / month)	N/A	TT	Not Detected	N/A	No	2024	Naturally present in the environment.
Distribution system <i>E. coli</i> (positive samples)	See <i>E. coli</i> note ¹	1	Not Detected	N/A	No	2024	Human and animal fecal waste.
Fecal Indicator -Positive <i>E. coli</i> at the source	TT	1	Not Detected	N/A	No	2024	Human and animal fecal waste.
Sodium (ppm)	*N/A	N/A	5.0	5.0	No	2024	Weathering of minerals in soil/de-icing
City of Reading Disinfectant By-Products							
TTHM – Total Trihalomethanes (ppb)	N/A	80	19	N/A	No	2024	By-product of drinking water disinfection.
HAA5 – Haloacetic Acids (ppb)	N/A	60	<1.0	N/A	No	2024	By-product of drinking water disinfection.
City of Reading Radioactive Contaminants							
Alpha emitters (pCi/L)	*1.49-pCi/L	15	1.49-pCi/L	N/A	No	2024	Erosion of natural deposits
Combined radium (pCi/L)	*0.59-pCi/L	5	0.59-pCi/L	N/A	No	2024	Erosion of natural deposits
Total Uranium (ppb)	<0.0010Mg/L	10	Not Detected	N/A	No	2024	Erosion of natural deposits
City of Reading Radioactive Per- and Polyfluoroalkyl Substances (PFAs) – Parts Per Trillion (ppt)							
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	<2-Ng/L	370	Not Detected	N/A	No	2024	Discharge and waste from industrial facilities utilizing the Gen X chemical.
Perfluorobutane sulfonic acid (PFBS) (ppt)	<2-Ng/L	420	Not Detected	N/A	No	2024	Discharge and waste from industrial facilities; Stain-resistant treatments.
Perfluorohexane sulfonic acid (PFHxS) (ppt)	<2-Ng/L	51	Not Detected	N/A	No	2024	Firefighting foam; Discharge and waste from industrial facilities.
Perfluorohexanoic acid (PFHxA) (ppt)	<2-Ng/L	400K	Not Detected	N/A	No	2024	Firefighting foam; Discharge and waste from industrial facilities.
Perfluorononanoic acid (PFNA) (ppt)	<2-Ng/L	6	Not Detected	N/A	No	2024	Discharge and waste from industrial facilities; Breakdown of precursors.
Perfluorooctane sulfonic acid (PFOS) (ppt)	<2-Ng/L	16	Not Detected	N/A	No	2024	Firefighting foam; Discharge from Electroplating and industrial facilities.
Perfluorooctanoic acid (PFOA) (ppt)	<2-Ng/L	8	Not Detected	N/A	No	2024	Discharge and waste from industrial facilities; Stain-resistant treatments.
¹ <i>E. coli</i> MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive, or (2) the supply fails to take all required repeat <i>E. coli</i> -positive routine samples, or (3) the supply fails to analyze positive repeat sample for <i>E. coli</i> . ² *Sampled from emergency standby well #1							