

2021 WATER QUALITY REPORT

for the

CITY OF MELBOURNE

The City of Melbourne strives to provide you with a safe, dependable supply of drinking water that is in compliance with the guidelines established by the Environmental Protection Agency (EPA). This report contains important information regarding the water quality in Melbourne's water system. The City of Melbourne currently purchases its water through a bulk connection with Iowa Regional Utilities Association (IRUA). The Newton Waterworks supplies IRUA with the bulk water supply which is pumped from 21 wells located in the Alluvial and Cambrian-Ordovician aquifers of the Skunk River. Results of water quality testing from our distribution system and from the Newton Waterworks supply to IRUA are provided below.

Contaminant	MCL (MCLG)	Compliance		Year Tested	Violation	Source
		Type	Result (Range)			
City of Melbourne Distribution System						
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	43.00 (43 - 43)	2021	No	By-products of drinking water chlorination.
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	13.00 (13- 13)	2021	No	By-products of drinking water disinfection.
Copper (ppm)	AL=1.3 (1.3)	90 th	0.0186 (ND - 0.0191)	2021	No	Corrosion of plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)	AL=15 (0)	90 th	0.00 (ND - 1)	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Distribution System						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.3 (ND – 1.88)	2021	No	Water additive used to control microbes.
Water Supplied by IRUA from the Newton Waterworks						
Fluoride (ppm)	4 (4)	SGL	0.6	2021	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Barium (ppm)	2 (2)	SGL	0.0088	2021	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Selenium	50 (50)	SGL	3.30	2021	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Chromium (ppb)	100 (100)	SGL	3.10	2021	No	Discharge from steel and pulp mills; Erosion of natural deposits.
Sodium (ppm)	N/A (N/A)	SGL	48.1	2021	No	Erosion of natural deposits; Added to water during the treatment process.
Nitrate [as N] (ppm)	10 (10)	SGL	3.100	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are the only contaminants detected in your drinking water. Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (MCL) – 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.
- 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.
- ppb -- parts per billion
- ppm -- parts per million
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND - Not detected
- RAA – Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, it exceeded, triggers treatment of other requirements which a water system must follow.

DEFINITIONS CONTINUED

- Maximum Residual Disinfectant Level Goal (MRDLG) - 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 contaminants.
- Maximum Residual Disinfectant Level (MRDL) - 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.
- SGL – Single Sample Result
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric Turbidity Units

GENERAL 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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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 Melbourne 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 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 drinking 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

SOURCE WATER ASSESSMENT INFORMATION

The Newton Waterworks obtains its water supply from the Alluvial and Cambrian-Ordovician aquifers. The Alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifers and overlying materials allow contaminants to move through the aquifers fairly quickly. The Cambrian-Ordovician aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The wells will be susceptible to activities such as leaking underground storage tanks, underground storage tanks, and hazardous waste generators. A detailed evaluation of your source water was completed by the IDNR, and is available from Iowa Regional Utilities Association at (641) 792-7011.

OTHER INFORMATION

The City of Melbourne is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near any part of the water system, please contact us at (641) 482-3338 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

For questions regarding this information, please contact James Pfantz, Superintendent of Public Works, at (750) 482-3338. Decisions regarding the water system are made at the Melbourne City Council meetings, which are held on the second Monday of each month at 7:00 p.m. at 605 Main Street; Melbourne, Iowa and are open to the public.