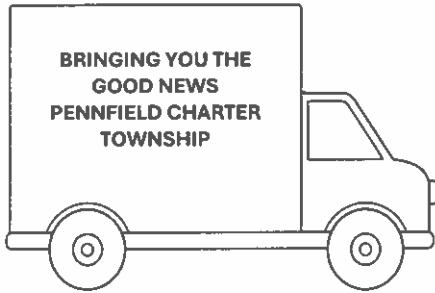


Pennfield Charter Township 2024 Annual Water Quality Report

Starting July 1, 2025, you will be able to view the 2024 Pennfield Charter Township Annual Water Quality Report online at: www.pennfieldmi.gov



This report contains important information about the source and quality of your drinking water, using data collected in 2024. If you would like a paper copy of the Pennfield Charter Township 2024 Annual Water Quality delivered to your home, please call (269) 968-8549.

2024 Water Quality Report for Pennfield Charter Township

Published in 2025

Water Supply Serial Number: WSSN 4760/5232

This report covers the drinking water quality for Pennfield Charter Township for the 2024 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2024. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

Your water comes from two groundwater wells, each over 200 ft deep. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is moderate.

There are no significant sources of contamination in our water supply. We are making efforts to protect our sources by participating in our Wellhead Protection Program.

Contaminants and their presence in water: 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 U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

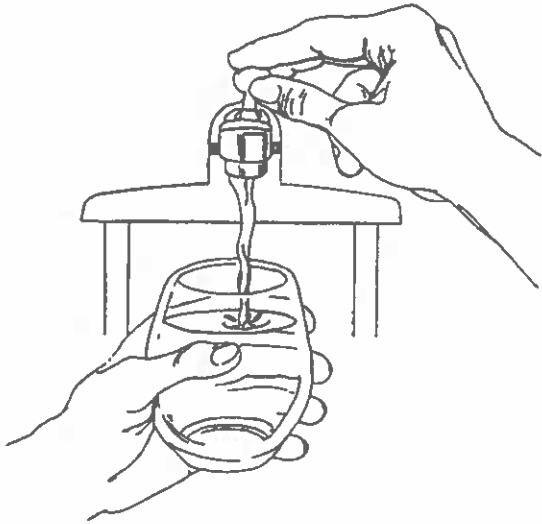
Vulnerability of sub-populations: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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. U.S. EPA/Center for Disease Control 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).

Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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 from 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 and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.



In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2024 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2024. The State allows 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. All the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- **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. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **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.
- **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.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **N/A:** Not applicable
- **ND:** not detectable at testing limit
- **ppm:** parts per million or milligrams per liter
- **ppb:** parts per billion or micrograms per liter
- **ppt:** parts per trillion or nanograms per liter
- **pCi/l:** picocuries per liter (a measure of radioactivity)
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

1 Monitoring Data for Regulated Contaminants for Pennfield Charter Township Water Supply WSSN: 4760

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Arsenic (ppb)	10	0	3.8	N/A	2023	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.26	N/A	2023	NO	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Nitrate (ppm)	10	10	0.481	N/A	2024	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	0.997	N/A	2024	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium ¹ (ppm)	N/A	N/A	13	N/A	2024	NO	Erosion of natural deposits
TTHM Total Trihalomethanes (ppb)	80	N/A	9.9	N/A	2024	NO	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	N/D	N/A	2024	NO	Byproduct of drinking water disinfection
Chlorine ² (ppm)	4	4	.78	.56-1.02	2024	NO	Water additive used to control microbes
Alpha emitters (pCi/L)	15	0	4	N/A	2019	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	2.52	N/A	2021	NO	Erosion of natural deposits
Total Coliform	TT	N/A	N/A	N/A	2024	NO	Naturally present in the environment
E. coli in the distribution system (positive samples)	See E. coli note ³	0	N/A	N/A	2024	NO	Human and animal fecal waste
Fecal Indicator – E. coli at the source (positive samples)	TT	N/A	N/A	N/A	2024	N/A	Human and animal fecal waste

¹ Sodium is not a regulated contaminant.

² The chlorine "Level Detected" was calculated using a running annual average.

³ E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is E. coli-positive, or (2) the supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for E. coli.

Per- and polyfluoroalkyl substances (PFAS)									
Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant		
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	N/A	N/D <2.0	N/A	2024	NO	Discharge and waste from industrial facilities utilizing the Gen X chemical process		
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	N/A	N/D <2.0	N/A	2024	NO	Discharge and waste from industrial facilities; stain-resistant treatments		
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	N/A	N/D <2.0	N/A	2024	NO	Firefighting foam; discharge and waste from industrial facilities		
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	N/D <2.0	N/A	2024	NO	Firefighting foam; discharge and waste from industrial facilities		
Perfluorononanoic acid (PFNA) (ppt)	6	N/A	N/D <2.0	N/A	2024	NO	Discharge and waste from industrial facilities; breakdown of precursor compounds		
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	N/A	N/D <2.0	N/A	2024	NO	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities		
Perfluorooctanoic acid (PFOA) (ppt)	8	N/A	N/D <2.0	N/A	2024	NO	Discharge and waste from industrial facilities; stain-resistant treatments		
Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water ⁴	Range of Results	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant		
Lead (ppb)	15	0	2	0-8ppb	2024	NO	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits		
Copper (ppm)	1.3	1.3	.4	0.1-0.6ppm	2024	NO	Corrosion of household plumbing systems; Erosion of natural deposits		

⁴ Ninety (90) percent of the samples collected were at or below the level reported for our water.

3 Monitoring Data for Regulated Contaminants for the City of Battle Creek Water Supply WSSN: 5232

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Arsenic (ppb)	10	0	1	N/A	2017	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Lead (ppb)	15	0	1	0-1	2024	NO	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.3	0-0.3	2024	NO	Corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Fluoride (ppm)	4	4	0.7	.46-.92	2024	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium ⁵ (ppm)	N/A	N/A	25	23-27	2024	NO	Erosion of natural deposits
TTHM Total Trihalomethanes (ppb)	80	N/A	73	50-120	2024	NO	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	17.6	8.5-33.7	2024	NO	Byproduct of drinking water disinfection
Chlorine ⁶ (ppm)	4	4	0.88	.25-1.65	2024	NO	Water additive used to control microbes
Alpha emitters (pCi/L)	15	0	1.2	.5-1.9	2021	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.7	1.0-2.4	2021	NO	Erosion of natural deposits
Total Coliform	TT	N/A	N/A	N/A	2024	NO	Naturally present in the environment
E. coli in the distribution system (positive samples)	See E. coli note ⁷	0	N/A	N/A	2024	NO	Human and animal fecal waste
Fecal Indicator – E. coli at the source (positive samples)	TT	N/A	N/A	N/A	2024	NO	Human and animal fecal waste

⁵ Sodium is not a regulated contaminant.

⁶ The chlorine “Level Detected” was calculated using a running annual average.

⁷ E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is E. coli-positive, or (2) the supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for E. coli.

In addition to owning and operating an independent water utility, Pennfield Township also utilizes water service from the City of Battle Creek to serve a portion of our residents. The water quality report for the City of Battle Creek Water System WSSN:5232 is included in this report. The properties served by the City of Battle Creek Water System are at the following locations:

Bellevue Road	Garrison Road	45 Park Avenue	600-740 North Avenue
Brigden Drive	Hampton Avenue	Pickford Avenue	69-187 Sharon Avenue
Burton Street	Hidden Lane	Raymond Road	10-77 Van Armon Street
Charlemagne Blvd.	Kimball Avenue	Roosevelt Avenue	
Cooper Avenue	LaGrange Avenue	Toulouse Blvd.	
Darlene Lane	Maxwell Avenue	Wagner Drive	
Dick Street	Mill Road	Willison Avenue	
Eiffel Drive	54 Montford Street		

Information about lead:

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. Pennfield Charter Township 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 Pennfield Charter Township 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>.

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2024.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at Pennfield Charter Township Office located at 20260 Capital Avenue NE, Battle Creek, MI 49017. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. Pennfield Charter Township Board Meetings are held on the 2nd Tuesday of each month at 6:00 pm. Meetings are held at the Pennfield Middle School located at 8587 Pennfield Road, Battle Creek, MI 49017.

For more information about your water, or contents of this report, contact Utilities Operators Jose Ramirez at (269) 209-5861 or Brian Phillips at (269) 209-5860. A copy of this report is available on our website at www.pennfieldmi.gov or upon request. For more information about safe drinking water, visit the U.S. EPA at <http://www.epa.gov/safewater>.