Hartland Township 2022 Consumer Confidence Report

Water Quality Report

Hartland Townships Water System

Hartland Township presents the 2022 Annual Consumer Confidence Report on Water Quality. Once again, our water quality standards have surpassed the requirements mandated by the U.S. Environmental Protection Agency (EPA) and the State of Michigan's Department of Environmental Quality (MDEQ). Hartland Township's water treatment plant currently receives source water from three active submersible wells. The wells are capable of an output of 2.594 million gallons per day. The treatment plant uses an iron/manganese removal system to treat source water prior to the distribution process. The current water system is comprised of approximately 24 miles of water mains ranging in size from 4" to 18" in diameter. Hartland Township currently distributes water to over 836 homes and businesses.

Safe Water

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) has placed regulations that limit the level of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration's (FDA) regulations establish limits for contaminants in bottled water, which must provide the same level of public health protection. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, but the mere presence of contaminants alone does not indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe drinking Water Hotline (800-426-4791). Contaminants that may be present in "source water" (untreated surface or groundwater) 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 occur or result from urban storm water 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 storm water runoff, and residential uses.
- **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.
- **Radioactive contaminants**, which can be naturally occurring or the result of oil and gas production and mining activities.

Hartland Township remains committed to meeting state and federal water quality standards, and consistently delivering safe drinking water to our community. 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 and its Availability

Hartland Township municipal water is sourced from three groundwater wells with depths in excess of 100 feet. The MDEQ in partnership with the U.S. Geological Survey, Hartland Township, and the Michigan Public Health Institute performed an assessment of Hartland Township's source water to determine the water system's susceptibility to potential contamination. The assessment's susceptibility rating is a seven-tiered scale ranging from very low to very high, based primarily on geologic sensitivity, water chemistry, and contaminant sources. Hartland Township's water is categorized as having a moderately low susceptibility to potential contaminant sources. Additionally, the water treatment plant has consistently provided satisfactory treatment of this source water to meet national drinking water standards.

Lead in Water Systems

Lead enters drinking water through corrosion of plumbing materials, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. Homes built before 1986 are more likely to have lead pipes, fixtures and lead-based solder. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to eight percent lead.

Beginning January 2014, changes to the EPA's Safe Drinking Water Act further reduced the maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures to 0.25 percent. Th most common problem is with lead-based solder, from which trace amounts of lead can enter the water, especially hot water.

Corrosion is the dissolving of metal caused by a chemical reaction between water and plumbing components. Several factors are involved when lead enters the water including the chemistry of the water (acidity and alkalinity), the amount of lead contacting water, how long the water stays in the plumbing materials and the presence of protective scales or coatings inside the plumbing material.

If present the 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. Hartland Township 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 have a lead service line it is recommended that you run your water 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, 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 1-800-426-4791 or at http://water.epa.gov/drink/info/lead.

To address corrosion of lead and copper into drinking water, the EPA issued the Lead and Copper Rule (LCR) under the authority of the Safe Drinking Water Act (SDWA). The LCR requires corrosion control treatment to prevent lead and copper from contaminating drinking water. Corrosion control treatment means systems must

make drinking water less corrosive to the materials it comes into contact with on its way to consumers' taps. While corrosive water is not the norm, is it generally associated with surface water. Surface water refers to lakes, streams and rivers. Surface water is relatively susceptible to environmental contaminants; however, it is easily treatable. Many metropolitan areas use surface water as the source water for their water systems.

Water Quality Data Table

The following tables list all the drinking water testing results for 2022. The presence of contaminates 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 in the calendar year of the report. The EPA or the State requires the Township to monitor for certain contaminated less than once per year because the concentrations of the contaminates do not change frequently.

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Disinfectants & Disinfection By-Products

(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)

Contaminants	MCLG or MRDLG	MCL,TT, or MRDL	Hartland Water	Range		Sample Date	Violation Yes/No	Typical Source
				Low	High			
Chlorine (as Cl2) (ppm)	4	4	0.85	0.3	1.33	2022	No	Water additive used to control microbes
(HAA5) (ppb)	NA	60	6.0	NA	NA	2022	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	2.0	NA	NA	2022	No	By-product of drinking water disinfection

Inorganic Contaminants

Contaminants	MCLG or MRDLG	MCL,TT, or MRDL	Hartland Water	Range		Sample Date	Violation Yes/No	Typical Source
				Low	High			
Fluoride (ppm)	4	4	0.21	0.14	0.42	2022	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic (ppb)	0	10	3.0	NA	NA	2018	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste
Nitrate (ppm)	10	10	ND	NA	NA	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (ppm)	250	250	51	NA	NA	2022	No	Erosion of natural deposits; leaching

Microbiological Contaminants

A violation occurs when a routine sample and a repeat sample, in any given month, are total coliform positive, and one is also fecal coliform or E. coli positive.

Contaminants	MCLG or MRDLG	MCL,TT, or MRDL	Hartland Water	Range		Sample Date	Violation Yes/No	Typical Source
				Low	High			
Fecal coliform/E. coli (positive samples)	0	0	0	NA	NA	2022	No	Human and animal fecal waste
Total coliform (positive)	0	NA	0	NA	NA	2022	No	Naturally present in the environment

Inorganic Contaminants								
Contaminants	MCLG or MRDLG	MCL,TT, or MRDL	Hartland Water	Range		Sample Date	Violation Yes/No	Typical Source
				Low	High			
Copper - action level at consumer taps (ppb)	1300	1300	200	10	240	2022	No	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	15	15	5	ND	6	2022	No	Corrosion of household plumbing systems; Erosion of natural deposits.

The hardness of Hartland Township municipal water tested at 460 mg/L in 2022.

Test Result Unit Descriptions	
ppm	Parts per million, or milligrams per liter (mg/L)
ppb	Parts per billion, or micrograms per liter (µg/L)
positive samples/month	Number of samples taken monthly that were found to be positive
positive samples	The number of positive samples taken that year
NA	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended.
Important Drinking Water Definitions	
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.
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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	Maximum residual disinfection 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 contaminants.
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.
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level

PFAS Testing in Hartland

Per- and polyfluoroalkyl substances, commonly known as PFAS, are contaminants of emerging concern. PFAS are a large group of human-made chemicals that are fire resistant and repel oil, stains, grease, and water. They have been widely used in fire-fighting foams, stain repellants, nonstick cookware, waterproof clothing and shoes, fast food wrappers, personal care products, and many other consumer goods. PFAS chemicals are very persistent, meaning that they do not easily break down in the environment.

These chemicals are widely used and can ultimately move into our groundwater and surface waters such as lakes, rivers, and streams. Some public water supplies obtain their water from groundwater, some from surface waters, and some from a blend of groundwater and surface water sources. Approximately 75 percent of Michigan residents get their drinking water from a community water supply.

In October 2019, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) submitted draft PFAS drinking water rules to Governor Whitmer. The final rules took effect of August 3, 2020. These rules amend current drinking water rules by establishing maximum contaminant levels (MCLs) and sampling requirements for seven PFAS compounds, affecting approximately 2,700 water supplies in Michigan.

The standard monitoring schedule for community and nontransient noncommunity public water supplies is quarterly. A water supply must sample quarterly if a contaminant is detected above the reporting limit in any sample. A supply may be reduced to annual monitoring based on satisfactory results of prior sampling. Compliance with a PFAS MCL is based on the running annual average at each sampling point. A supply is not in violation until either one year of quarterly sampling has been completed or fewer samples cause the running annual average to exceed an MCL. If a supply fails to collect all required quarterly samples, compliance is based on the running annual average of the samples collected. If the supply is determined to be out of compliance with a PFAS MCL, the supply must notify the public within 30 days.

There are many other PFAS compounds that currently do not have LHA levels. For information on PFOA, PFOS, and other PFAS, including possible health outcomes, you may visit these websites: www.epa.gov/pfas, www.michigan.gov/pfasresponse or www.michigan.gov/PFASDrinkingWaterRules.

This report is updated annually, and Hartland Township will keep you informed of any problems that may occur throughout the year, as they happen. Additional copies are available at Hartland Township Offices, 2655 Clark Rd, Hartland, MI 48353. Electronic copies can be requested at DPW@HartlandTWP.com as well. For more information about safe drinking water rules and regulations, visit the U.S. Environment Protection Agency at www.epa.gov/safewater.

COVID-19 and Drinking Water

The Environmental Protection Agency (EPA) recommends that Americans continue to use and drink tap water as usual. The World Health Organization (WHO) has stated that the “presence of the COVID-19 virus has not been detected in drinking-water supplies and based on current evidence the risk to water supplies is low.” According to the Center for Disease Control (CDC), COVID-19 is mainly thought to spread between people who are in close contact with one another. Further, EPA’s drinking water regulations require treatment at public water systems to remove or kill pathogens, including viruses. Read more from the CDC about transmission of COVID-19 at www.cdc.gov/coronavirus/2019-ncov/index.html.

Service Disruption

As Hartland Township continues to develop along the M-59 Corridor, the Public Works Department may be required to interrupt water service in your area for new connections. In the event of a large water service disruption that results in decreased pressure for an isolated section of the distribution system, the Public Works Department may issue a “boil water advisory.” This is a precautionary measure meant to protect the public from a potential bacteriological contamination. In addition to hand-delivered flyers, the boil water advisory is sent to media outlets that reach beyond the affected area. This is done to ensure the greatest coverage of the event. Boil advisories are generally 48 hours long and are lifted 48 hours after the pressure

is restored and the system is put back in service. During this time, a bacteriological sample is then taken and tested. Two tests performed back-to-back (24-hours apart) must be completed before the service area is able to receive a rescind notice of the boil water advisory. In the event you experience any discoloration in your water please run your COLD water for up to ten minutes. The discoloration can be caused by sediment disruption in the mains themselves, this is not harmful in any fashion. DO NOT run hot water during this time as it would allow the sediment into your hot water tank and could cause a sulfur smell or clogging of the tank.

Public Participation

We invite public participation in decisions that affect drinking water quality. The Township Board occasionally acts regarding the Hartland Water System, and Township Board Meetings are held the first and third Tuesdays of the month at 7:00 pm at the Township Hall, located at 2655 Clark Road Hartland, Michigan 48353. Contact the Township Hall office at 810-632-7498 or visit the Township's website at www.HartlandTWP.com for specific meeting dates and agendas.

Public Works Department
2655 Clark Rd
Hartland, MI 48353

NOTICE TO NON-RESIDENTIAL WATER CUSTOMERS

Federal regulations require that as the billing customer, it is your responsibility to ensure that all water consumers at your facility (whether business, educational institute, apartment complex, etc.) have access to this report. Please post this CCR in a visible area. Additional copies are available for your distribution by contacting the Public Works Department at 810-632-7498.

The Michigan Department of Environmental Quality (MDEQ) officially reorganized into the Michigan Department of of Environment, Great Lakes and Energy (EGLE) effective April 22,2019