



Water Quality Report for the Village of Howard City 2018

This report covers the drinking water quality for the Village of Howard City for the 2018 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2018. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from 2 groundwater wells, each over 170 feet 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 for well 5 is "low" and for well 3, "moderate".

There are no significant sources of contamination in our water supply. We are making efforts to protect our sources through daily, monthly, and annual testing and monitoring for any future contaminant sources.

If you would like to know more about this report, please contact Village Manager Michael Falcon at the Village Municipal Complex located at 125 E. Shaw Street. He may also be contacted by phone at 231-937-4311 ex. 3563 or by email at: mfalcon@howardcity.org.

- **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 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)**

- **Health Issues:** 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 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 microbial contaminants are available at number listed above.

- **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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.



PFAS (Per- and Polyfluoroalkyl Substances):

PFAS, sometimes called PFC's, are a group of chemicals that are resistant to heat, water, and oil. PFAS have been classified by the U.S. Environmental Protection Agency (EPA) as an emerging contaminant on the national landscape. For decades, they have been used in many industrial applications and consumer products such as carpeting, waterproofing clothing, upholstery, food paper wrappings, fire-fighting foams, and metal plating. They are still used today. PFAS have been found at low levels both in the environment and in blood samples from the general U.S. population.

These chemicals are persistent, meaning they do not break down in the environment. They also bioaccumulate, meaning the amount builds up over time in the blood and organs. Although our understanding of these emerging contaminants is constantly changing, elevated levels of PFAS have the potential to cause increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers. Links to these health effects in humans are supported by epidemiologic studies and by laboratory studies in animal models.

The U.S. EPA has not established enforceable drinking water standards, called maximum contaminant levels, for these chemicals. However, U. S. EPA has set a lifetime health advisory (LHA) level in drinking water for two PFAS: perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). The LHA is the level or amount, *below which no harm is expected from these chemicals*. The LHA level is 70 parts per trillion (ppt) for PFOA and 70 ppt for PFOS. If both PFOA and PFOS are present, the LHA is 70 ppt for the combine concentration.

The Village of Howard City chose to have our wells tested by a private laboratory before knowing of the State mandated test. The results from both the State and private tests indicated there are no PFOA's or PFOS's in the samples from our two wells. There are many other PFAS compounds that currently do not have LHA levels. For information on these, including possible health outcomes, you may visit these websites: <https://www.epa.gov/pfas>; <https://www.atsdr.cdc.gov/pfas/>; or <http://www.michigan.gov/pfasresponse>.

Why was the Village of Howard City's source water tested for PFAS? The MDEQ has coordinated a statewide initiative to test the drinking water from all schools that use well water and community water supplies for PFAS. MDEQ is taking this

precautionary step to determine if public health actions are needed.

You may have questions such as is it safe to eat fish in areas where PFAS are detected? Wild fish samples are being collected and analyzed to determine the levels of PFAS in fish. Recommendations will then be made on how much is safe to eat. Some information is already available on the State of Michigan Eat Safe Fish guides, which are available at <http://www.michigan.gov/eatsafefish>. Also, information currently suggests that swimming or bathing in water affected by PFAS is not a major contributor to overall exposure.

State and local agencies are actively working to obtain more information about this issue as quickly as possible. Additional testing of the drinking water will be conducted to demonstrate that the PFAS levels are consistent, and reliably below the existing LHA.

If you are concerned about exposure to PFAS in drinking water, you may contact the MDHHS Toxicology Hotline at 800-648-6942 or the CDC/ATSDR at <https://www.cdc.gov/cdc-info/>. You may call the CDC at 800-232-4636. You may also contact the Village of Howard City Water Dept.

The state has created a website where you can find information about PFAS contamination and the efforts to address it in Michigan. The web address is: <http://michigan.gov/pfasresponse>.



Water Quality Data



The table below lists all the drinking water contaminants that we detected during the 2018 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 – December 31, 2018. 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 of 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):** means 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):** means 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.
- **N/A-** Not applicable; **ND-** not detectable at testing limit; **ppb-** parts per billion or micrograms per liter; **ppm-** parts per million or milligrams per liter; **pCi/l-** picocuries per liter (measure of radioactivity);
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Highest Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Fluoride (ppm)	4	4	.51	.31 - .51	2018	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Barium (ppm)	2	2	.04 - .05	N/A	2015	No	Erosion of natural deposits
TTHM – Total Trihalomethanes (ppb)	80	N/A	9.4	N/A	2018	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	ND	N/A	2018	No	Byproduct of drinking water disinfection
Chlorine* (ppm)	MRDL	MRDLG	0.25	0.03-1.01	2018	No	Water additive used to control microbes
	4	4					
Radioactive Contaminant	MCL	MCLG	Highest Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Gross Alpha (pCi/L)	15	0	1.02	.725 – 1.02	2015	No	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	1.07	0.31 – 1.07	2015	No	Erosion of natural deposits
Contaminant Subject to AL	Action Level	MCLG	90% of Samples** ≤ This Level		Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	1		2018	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb)	1300	1300	100		2018	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives



Unregulated Contaminant ***	Average Level Detected	Range	Year Sampled	Comments
Sodium (ppm)	22.5	22-23	2018	Typical source is erosion of natural deposits

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

** 90 percent of the water customer tap samples collected were at or below the level reported for our water.

*** Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Information about lead: 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 Village of Howard City is responsible for providing high quality drinking water (please note the results above), 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 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://www.epa.gov/safewater/lead>.

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	>1 positive monthly sample (>5.0% of monthly samples positive)	0	0	No	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	Routine and repeat sample total coliform positive, and one is also fecal or <i>E. coli</i> positive	0	0	No	Human and animal fecal waste

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We are proud to report that *we met all the monitoring and reporting requirements for 2018.*

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 the Village of Howard City Municipal Complex at 125 E. Shaw Street. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. The Village has regularly scheduled Council meetings on the third Monday of each month. The public is welcome to attend. For more information about your water, or the contents of this report, contact Bill Cornelisse at 231-937-4311 ex.3564 or by email at hcdms@howardcity.org. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

