

# 2018 Water Quality Report for the Village of Dryden

This report covers the drinking water quality for the village of Dryden 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 96 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 of our source is moderate on well #3. There has been no assessment performed on well #4 at this time.

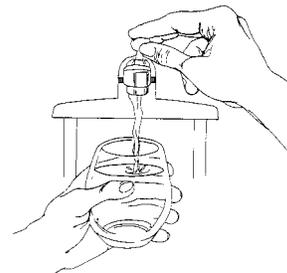
There is no significant source of contamination in our water supply since the start-up of the arsenic removal system in May 2008.

If you would like to know more about the report, please contact James Honnold at 5602 Main Street, Dryden MI 48428 or by phone at 810-796-2291

- **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 **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. 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).

- **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.

## 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, 2017. 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):** 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 (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.
- **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 very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Regulated Contaminant	MCL	MCLG	Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Arsenic (ppb)	10	0	0.004	0 - 5	2018	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.09	N/A	2016	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	N/D	N/A	2016	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.77	N/A	2018	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
TTHM - Total Trihalomethanes (ppb)	80	N/A	0.0013	N/A	2018	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	0	N/A	2018	No	Byproduct of drinking water disinfection
Chlorine* (ppm)	<b>MRDL</b>	<b>MRDLG</b>	0.28	0.1 – 0.5	2018	No	Water additive used to control microbes
	4	4					

Radioactive Contaminant	MCL	MCLG	Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Alpha emitters (pCi/L)	15	0	0	N/A	2014	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.5	N/A	2014	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 (ppm)	1.3	1.3	0.37	2018	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
Special Monitoring and Unregulated Contaminant ***			Level Detected	Year Sampled	Comments		
Sodium (ppm)			20	2018	Typical source is erosion of natural deposits		

\* Chlorine was calculated using the running annual average.

\*\* 90 percent of the 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 Dryden 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 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 or at <http://www.epa.gov/safewater/lead>.*

*Infants and children who drink water containing lead in excess of the action level 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.*

The village of Dryden was required to submit a consumers notice for Lead and Copper to the MDEQ by December 31, 2018 and failed to do so. The certified operator submitted the Lead and Copper report form but not the consumers notice. The report was submitted on February 22, 2019. This was an oversight on the villages part and will not happen again.

**From January 1, 2018, to March 31, 2018:**

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

**From April 1, 2018, to December 31, 2018:**

Microbial Contaminants	Number Detected	Level 1 Assessment Triggered?	Level 2 Assessment Triggered?	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	0	No	No	No	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	0	No	No	No	Human and animal fecal waste

As part of the MDEQ's proactive statewide sampling initiative, the Village of Dryden was tested for Pre- and Polyfluoroalkyl (PFAS) on 8/14/2018 at our treatment plant. The results were ND (Non Detected)

Monitoring and Reporting to the DEQ Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety.

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 Dryden's village office located at 5602 Main Street, Dryden MI 48428. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. Regular council meetings are held the first Tuesday of the month at the village office at 7:00 pm. The village office is located at 5602 Main Street, Dryden MI 48428. For more information about your water, or the contents of this report, contact James Honnold at 810-796-2291 or visit the village's website at [www.villageofdryden.com](http://www.villageofdryden.com). For more information about safe drinking water, visit the U.S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).

