

Allendale Charter Township Water System



2020 WATER QUALITY REPORT

Attention: This report will not be mailed to you. If you want a paper copy, please call the Township Office at (616) 895-6295 or email watersewer@allendale-twp.org

En Español: Este informe contiene información muy importante sobre el agua potable que le provee a Ud. la ciudad de Grand Rapids. Tradúxcalo o hable con alguien que lo entienda bien.

Do I need to take special precautions?

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 may seek advice about drinking water from their health care providers. The Environmental Protection Agency (EPA) Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available for the Safe Dinking Water Hotline 800.426.4791.

Additional Information for Lead

If present, elevated levels of lead can cause health problems, especially for pregnant women and young children. Lead in drinking water is primarily form materials and components associated with service lines and home plumbing. Allendale Public Utilities 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 may minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking and 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 the lead service line. If you are concerned about lead in your water, you may with 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 1.800.4286.4791 or at <http://water.epa.gov/drink/info/lead>.

The Allendale Charter Township Water System has a total of 3, 447 service lines. There are zero lead or presumed lead service lines

How can I get involved
Call customer service at 616.895.6295

Is my water safe?

Yes. Allendale Water System customers continue to receive water that meets or exceeds all of the requirements of the Safe Water Drinking Act (SWDA). We are pleased to present the 2020 Water Quality Report (Consumer Confidence Report) as required by the SWDA. The statistics listed in the table located within this report are water monitoring results from January 1. 2020 to December 31, 2020 unless otherwise noted.

Source Water Assessment

Lake Michigan, a surface water source, is the sole source of water which is treated by the City of Grand Rapids and purchased by Allendale Charter Township and distributed through our own distribution system.

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) completed a Source Water Assessment for the City of Grand Rapids water supply in 2003. This assessment evaluates the potential risk of contamination based on several factors including geological sensitivity, water chemistry and contaminant sources. Risk Assessment is critical in protecting the source water from future contamination. This assessment uses a 7-tiered rating scale from “moderately low” to “very high”. The susceptibility of our source water to potential contamination was given a rating of moderately high. The geographic area in this assessment covers 708 square miles and includes several watersheds.

The Grand Rapids Water Filtration Plant and the Allendale Water System routinely and continuously monitor the water for a variety of chemicals to assure safe drinking water.

Anyone wanting additional information about the Source Water Assessment or questions concerning the water quality testing and results within this report may contact:

Mike Grenier,
Water Filtration Plant Superintendent,
Phone: 616.456.3927, or

Sam Vandenberg, Chemist II,
Phone: 616.456.3700
Email: svandenb@grcity.us

We protect your water

As part of the Safe Drinking Water Act, every water system is required to assure that their water customers have water that is potable or safe to drink. The Allendale Water System has its own Cross Connection Control Program to assure the water is safeguarded. It is closely monitored by EGLE on an ongoing basis.

Cross Connection Control staff has inspected governmental, commercial and industrial accounts for potential dangers to the water system. These accounts are required to have backflow prevention devices to prevent contamination of the water supply. To continue to protect the water system, each of these devices must be maintained, inspected and tested each year by a licensed certified plumber. The test results are sent to the Allendale Water System Cross Connection Control Program to verify that testing has been completed. Staff checks to see that all devices are tested by state certified testers and follows up if test results are not returned.

Lawn Irrigation Systems and Backflow Prevention

Lawn irrigation systems make watering lawns and gardens easier and save time. However, water that may be contaminated by bacteria, weed killers and/or fertilizers can be back siphoned into your drinking water. Your irrigation system must be protected by an approved backflow prevention device.



Irrigation systems not protected by this device could endanger the health of a household, neighborhood or community.

If you are considering installing a lawn irrigation system or already have one, please make sure a backflow prevention device is installed by a licensed plumber as required by the Michigan Plumbing Code. Any irrigation system not having a backflow prevention device will be required to have one installed. If you have questions regarding your lawn irrigation system and a backflow prevention device, please call our Cross Connection Control Program at 616.895.5142.

About Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams , ponds, reservoirs, springs, and wells. As the water travels over the surface of the land or though 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 human activity. Contaminants that may be present in source water include all of the following:

Microbial contaminants, such as viruses and bacteria which may come form 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 activity from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminates in water provided by public water supplies. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline 800.426.4791

Leaks May Cost More Than You Realize

Faucet Leaks: It may look like a small drip, but remember it is dripping 24 hours a day, everyday. You can see how this adds up by collecting the dripping water in a glass for one hour, then multiplying that amount by 24 hours to find out how much water is wasted every day. Fix that leak, save money.

Toilet Leaks: This is possibly the biggest source of water use in your home. A malfunctioning toilet of any magnitude costs you money. Leaks are often not heard until the tank lid is lifted. Even if you do not hear water running you will want to be sure that the water level is one inch below the over-flow tube. Higher water can creep over the edge without anyone noticing. Another problem is having a flapper that seals sometimes and does not seal other times. When it does not seal the water runs continuously until the next flush. Usually these leaks are easily fixed, and the repairs quickly pay for themselves by reducing the amount of your utility bill.



Hidden Leaks: One way to determine if you have a hidden leak is to look at the head of your meter. First, make sure all your faucets are off. Second, on newer all plastic meters, there will be a plus sign in the circle indicating water is flowing. On a older brass meter, the triangle will be spinning indicating that water is flowing.

Call us if you have any questions about finding leaks, your water meter,

or your shut-off valve inside the house.
Phone: 616.895.6295.

To ensure tap water is safe to drink, the EPA has regulations that limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report, unless otherwise noted. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. 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. In this table, you may find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions.

Contaminants	MCLG	AL	90 th	Range		Sample	# Samples exceeding AL	Typical Source
			Percentile Value	Low	High	Date		
Inorganic Contaminants (Action level at consumer taps)(The data presented in this report is from the most recent testing done in accordance with the regulations)								
Copper [action level at consumers taps] (ppm)	1.3	1.3	0.1	0.00296	0.0926	2020	0	Corrosion of household plumbing systems; erosion of natural deposits
Lead [action level at consumers taps] (ppb)	0	15	0	ND	1.35	2020	0	Lead service lines, corrosion of household plumbing including fittings and fixtures, erosion of natural deposits
These 2020 sample results are from 31 homes selected as high risk for lead and copper contamination								
Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample	Violation	Typical Source
				Low	High	Date		
Disinfectants & Disinfection By- Products (Regulated in the Distribution System) There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.								
Chlorine [as Cl2] (ppm)	4	4	1.12	0.26	1.54	2020	No	Water additive used to control microbes
Haloacetic Acids [HAA5] (ppb)	NA	60	29.7	16.2	52	2020	No	By-product of drinking water chlorination
Total Trihalomethanes [TTHMs] (ppb)	NA	80	45.9	26.9	56.5	2020	No	By-product of drinking water chlorination
Inorganic Contaminants								
Barium (ppm)	2	2	0.019	NA	NA	2018	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of Natural Deposits
Fluoride (ppm)	4	4	0.51	0.28	0.64	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [as Nitrogen] (ppm)	10	10	0.4	NA	NA	2019	No	Runoff from Fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perfluorooctane sulfonic acid [PFOS] (ppt)	NA	16	1.65	ND	2.34	2020	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities
Perfluorooctanoic acid [PFOA] (ppt)	NA	8	0.52	ND	2.10	2020	No	Discharge and waste from industrial facilities; stain-resistant treatments
Sodium (ppm)	NA	NA	11	NA	NA	2020	No	Erosion of natural deposits
Unregulated Contaminants (Information collected through the monitoring of the contaminants/chemicals will help ensure that future decisions on drinking water standards are based on sound science)								
Brominated Haloacetic Acids Group[HAA6Br] (ppb)	NA	MNR	11.6	6.08	17.63	2019	No	By-product of drinking water chlorination
Haloacetic Acids Group [HAA9] (ppb)	NA	MNR	41.47	19.22	77.73	2019	No	By-product of drinking water chlorination
Manganese (ppb)	NA	MNR	0.446	ND	0.446	2019	No	Naturally-occurring element; used in steel production, fertilizer, batteries and fireworks; essential nutrient
Microbiological Contaminants								
Turbidity (NTU)	NA	0.3	100%	NA	NA	2019	No	Soil runoff
100% of the sample were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.142. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Voluntary Monitoring (Information collected through the monitoring of the contaminants/chemicals will help ensure that future decisions on drinking water standards are based on sound science)								
Arsenic	0	10	ND	NA	NA	2020	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production waste
Chromium-6 [hexavalent chromium] (ppb)	NA	MNR	0.21	0.17	0.25	2015	No	Erosion of natural deposits; industrial contaminant
Cryptosporidium	0	TT	ND	NA	NA	2020	NR	Contaminated rivers and Lakes
Giardia lamblia	0	TT	ND	NA	NA	2020	NR	Contaminated rivers and Lakes
Mercury	2	2	ND	NA	NA	2020	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from crop land
Hexafluoropropylene oxide dimer acid [HFPO-DA] (ppt)	NA	370	ND	NA	NA	2020	No	Discharge and waste from industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid [PFBS] (ppt)	NA	420	ND	NA	NA	2020	No	Discharge and waste from industrial facilities; stain-resistant treatments
Perfluorohexane sulfonic acid [PFHxS] (ppt)	NA	51	ND	NA	NA	2020	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorohexanoic acid [PFHxA] (ppt)	NA	400,000	ND	NA	NA	2020	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorononanoic acid [PFNA] (ppt)	NA	6	ND	NA	NA	2020	No	Discharge and waste from industrial facilities; breakdown of precursor compounds



Important Drinking Water Definitions & Units

90th Percentile:
The minimum level of contamination found in the highest 10 percent of samples collected.

AL (Action Level):
The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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.

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.

MNR: Monitored Not Regulated

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 or control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant 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 disinfection to control microbial contaminants.

NTU (Nephelometric Turbidity Units):
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

NA: Not applicable

ND: Not detected

NR: Monitoring not required but recommended

ppm (parts per million): Number of milligrams of substance in one liter of water (mg/L)

ppb (parts per billion): Number of micrograms of substance in one liter of water (µg/L)

ppt (parts per trillion): Number of nanograms of substance in one liter of water (ng/L)

TT (Treatment Technique):
A required process intended to reduce the level of a contaminant in drinking water

Note: The data table contains the highest annual test results for all required and voluntary monitoring of regulated substances. The Grand Rapids Water System monitors many regulated and unregulated substances more frequently than required and, as a consequence, these results are included in the table. In addition to the test results listed in the table, we analyzed the water for 108 different contaminants/chemicals in 2020; none of which were found at detectable levels.