2020 Water Quality Report for Scio Township

Water Supply Serial Number: MI0005977

This report covers the drinking water quality for Scio Township for the 2020 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2020. 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 the City of Ann Arbor Water Treatment Plant which draws its' source water from the Huron River and several groundwater wells. THE CITY OF ANN ARBOR WATER QUALITY REPORT IS AVAILABLE TO REVIEW AT WWW.QUALITYWATERMATTERS.ORG.

If you would like to know more about this report, please contact: Steve Wyzgoski, Scio Township Utilities Director, 827 N. Zeeb Road, Ann Arbor, MI 48103, by telephone at (734) 369-9350 or by email at swyzgoski@sciotownship.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 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 2020 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, 2020. 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:

- <u>Maximum Contaminant Level Goal (MCLG)</u>: 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.
- <u>Maximum Contaminant Level (MCL)</u>: 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.
- <u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.
- <u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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
- ppm: parts per million or milligrams per liter
- ppb: parts per billion or micrograms per liter
- ppt: parts per trillion or nanograms per liter
- <u>pCi/I</u>: 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.

Regulated Contaminants Detected (City of Ann Arbor)

| Regulated Contaminant | MCL, TT, or MRDL | MCLG or MRDLG | Level Detected | Range | Year Sampled | Violation Yes/No | Typical Source of Contaminant |
|---|---------------------|------------------|-------------------|------------------|-----------------|---------------------|---|
| Perflourohexanoic acid (ppt) | 400,000 | N/A | 7.2 | <2.0-7.2 | 2020 | No | Firefighting foam; industrial wastes |
| Perflourooctanesulfonic acid (PFOS) (ppt) | 16 | N/A | 3.1 | <2.0-3.1 | 2020 | No | Firefighting foam; industrial wastes |
| Bromate (ppb) | 10 | 0 | 5.2 | <1.0-5.8 | 2020 | No | Byproduct of ozone disinfection |
| Chloramines (ppm) | 4 | 4 | 2.5 | 1.0-3.4 | 2020 | No | Disinfectant added at Water Plant |
| Total organic Carbon (TOC) (% removal) | 58% | 25% Minimum | 58% | 51-62% | 2020 | No | Naturally present in the environment |
| TTHM Total Trihalomethanes (ppb) | 80 | N/A | 4 | 0.95-6.3 | 2020 | No | Byproduct of drinking water disinfection |
| HAA5 Haloacetic Acids (ppb) | 60 | N/A | 7 | 2.8-9.5 | 2020 | No | Byproduct of drinking water disinfection |
| | | | | | | | |
| Alpha emitters (pCi/L) | 15 | 0 | 0.933+- 0.47 | N/A | 2020 | No | Erosion of natural deposits |
| Combined radium (pCi/L) | 5 | 0 | 2.00+- 0.85 | N/A | 2020 | No | Erosion of natural deposits |
| Barium (ppb) | 2000 | 2000 | 18 | N/A | 2020 | No | Erosion of natural deposits |
| Flouride (ppm) | 4 | 4 | 0.76 | 0.32- 0.76 | 2020 | No | Erosion of natural deposits; Water additive |
| Nitrate (ppm) | 10 | 10 | 0.6 | 0.2-0.6 | 2020 | No | Runoff from fertilizer use; Erosion of natural deposits |
| Nitrite (ppm) | 1 | 1 | 0.081 | <0.025- 0.081 | 2020 | No | Runoff from fertilizer use; Erosion of natural deposits |
| Turbidity (NTU) | <0.3 NTU | N/A | 0.23 | <0.3 (100%) | 2020 | No | Naturally present in the environment |
| | | | | | | | |

2020 Special Monitoring (City of Ann Arbor)

| Regulated Contaminant | Level Detected | Range | Year Sampled | Typical Source of Contaminant |
|-------------------------------------|-------------------|-------|-----------------|---|
| 1,4 Dioxane (ppb) | <0.12 | <0.12 | 2020 | Groundwater contamination from manufacturing process. |
| N-Nitrosodimethylamine (NDMA) (ppb) | <10 | N/A | 2020 | Byproduct of drinking water disinfection |
| Perchlorate (ppb) | <4.00 | N/A | 2020 | Nitrate fertilizer runoff. Industrial contamination. |
| Sodium (ppm) | 61 | 34-84 | 2020 | Erosion of natural deposits |

Additional Monitoring Other Water Quality Parameters of Interest (City of Ann Arbor)

| Parameter Detected | Average Level Detected | Range | Parameter Detected | Average Level Detected | Range |
|--|------------------------------|-------------|------------------------------|------------------------------|------------|
| Alkalinity, total (ppm as CaCO3) | 62 | 40-122 | Magnesium (ppm) | 13 | 5-19 |
| Aluminum (ppm) | 0.019 | N/A | Manganese (ppb) | 2.4 | <1.2-38 |
| Ammonia as N (ppm) | <0.10 | <0.10-0.20 | Mercury (ppb) | <0.20 | N/A |
| Arsenic (ppb) | <1.0 | N/A | Non-carbonate Hardness (ppm) | 59 | 23-95 |
| Calcium (ppm) | 29 | 18-55 | pH (s.U.) | 9.3 | 8.9-9.5 |
| Chloride (ppm) | 108 | 81-168 | Posphorus, Total (ppm) | 0.26 | <0.05-0.42 |
| Chromium (total) (ppm) | <2.0 | N/A | Potassium (ppm) | 3.3 | N/A |
| Conductivity (umhos/cm) | 590 | 483-791 | Sulfate (ppm) | 51 | 36-65 |
| Hardness (CaCO3) (ppm) | 121 | 86-200 | Temperature (Celsius) | 15.0 | 5.9-30.1 |
| Hardness (CaCO3) (gpg) | 7.1 | 5.0-11.7 | Total Solids (ppm) | 349 | 272-442 |
| Iron (ppm) | <0.025 | <0.025-0.13 | Zinc (ppb) | <5.0 | N/A |
| Lead (ppb) (at Water Treatment Tap) | <1.0 | N/A | | | |

Regulated at the Water Distribution System (Scio Township)

| Regulated Contaminant | Level Detected | Range | MCL | MCLG | Typical Source of Contaminant |
|-------------------------------|-------------------|---------|-----|------|--|
| Haloacetic Acids (HAA5) (ppb) | 9.1 | 3.0-9.1 | 60 | N/A | Byproduct of drinking water disinfection |
| Total Trihalomethanes (ppb) | 4 | 1-4 | 80 | N/A | Byproduct of drinking water disinfection |
| | | | | | |

Additional Monitoring Other Water Quality Parameters of Interest (Scio Township)

| Parameter Detected | Average Level Detected | Range | Parameter Detected | Average Level Detected | Range |
|----------------------------------|------------------------|---------|--------------------|------------------------|-------------|
| Alkalinity, total (ppm as CaCO3) | 56 | 44-70 | Sulfate (ppm) | 48 | 36-58 |
| pH (s.U.) | 9.3 | 9.2-9.5 | Turbidity (NTU | 0.08 | 0.02-0.26 |
| Hardness, calcium (CaCO3) (ppm) | 63 | 59-70 | Calcium (ppm) | 25 | 24-28 |
| Hardness, Total (ppm) | 121 | 92-150 | Iron (ppm) | 0.043 | 0.010-0.072 |
| Chloride (ppm) | 142 | 100-170 | Magnesium (ppm) | 14 | 7.8-20 |

Lead and Copper Results (Scio Township System)

| Parameter | Range | 90 th percentile | MCLG | # of Samples | # samples > AL | |
|----------------|--------------|--------------------------------|------|--------------|----------------|--|
| Copper mg/l | 0.018-0.080 | 0.068 | 1.3 | 20 | 0 | Erosion of natural deposits, corrosion of plumbing system. |
| Lead mg/l | <0.001-0.005 | 0.001 | 0 | 20 | 4 | Erosion of natural deposits, corrosion of plumbing system |

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. Scio 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 or at http://www.epa.gov/safewater/lead.

Infants and children who drink water containing lead 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.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

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 2020.

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 Scio Township Hall 827 N. Zeeb Road Ann Arbor, MI 48103.

We invite public participation in decisions that affect drinking water quality. Scio Township Board of Trustee meetings are held on the 2nd and 4th Tueday of each month at 7:00 P. M. For more information about your water, or the contents of this report, contact Steve Wyzgoski 2 (734) 369-9350 or at swyzgoski@sciotownship.org. For more information about safe drinking water, visit the U.S. EPA at http://www.epa.gov/safewater.