

2017 Consumer Confidence Report Data

MAYVILLE WATERWORKS, PWS ID: 11400576

Water System Information

If you would like to know more about the information contained in this report, please contact Tim Gutjahr at (920) 387-7906.

Opportunity for input on decisions affecting your water quality

The Water/Wastewater Commission meets every first Tuesday of the month at 6:00 PM at City Hall.

Health Information

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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source(s) of Water

| Source ID | Source | Depth (in feet) | Status |
|-----------|-------------|-----------------|--------|
| 2 | Groundwater | 794 | Active |
| 3 | Groundwater | 797 | Active |
| 4 | Groundwater | 800 | Active |
| 5 | Groundwater | 810 | Active |

To obtain a summary of the source water assessment please contact, Tim Gutjahr at (920) 387-7906.

Educational Information

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and 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, 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.

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. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Definitions

| Term | Definition |
|--------------------|--|
| AL | Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |
| Level 1 Assessment | A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system. |
| Level 2 Assessment | A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions. |
| 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. |
| MFL | million fibers per liter |
| 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. |
| 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 disinfectants to control microbial contaminants. |
| mrem/year | millirems per year (a measure of radiation absorbed by the body) |
| NTU | Nephelometric Turbidity Units |
| pCi/l | picocuries per liter (a measure of radioactivity) |
| ppm | parts per million, or milligrams per liter (mg/l) |
| ppb | parts per billion, or micrograms per liter (ug/l) |
| ppt | parts per trillion, or nanograms per liter |
| ppq | parts per quadrillion, or picograms per liter |
| TCR | Total Coliform Rule |

| Term | Definition |
|-------------|--|
| TT | Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. |

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Microbiological Contaminants

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments.

During the past year, we were required to conduct 1 Level 1 and 1 Level 2 assessments. All assessments were completed on time. We were required to take 10 corrective action(s). We completed all necessary Corrective Actions on time.

Assessments

| Assessment Description | Status | Due Date | Completed | Violation |
|--|---------------|-----------------|------------------|------------------|
| Perform Level 1 Assessment: Multiple Total Coliform-positive samples | COMPLETE | 8/25/2017 | 8/7/2017 | No |
| Perform Level 2 Assessment: Multiple Level 1 Triggers | COMPLETE | 11/14/2017 | 10/18/2017 | No |

Corrective Actions

| Corrective Action | Status | Due Date | Completed | Violation |
|--|---------------|-----------------|------------------|------------------|
| Clean and reseal the bases of the well bases at Wells 5 and 3 with grout or sealant | COMPLETE | 2/28/2018 | 2/13/2018 | No |
| Replace screens with non-corrosive 24-mesh screen | COMPLETE | 2/28/2018 | 2/13/2018 | No |
| Work with chemical supplier to have smaller amounts of sodium hypochlorite delivered and that deliveries occur every 30 to 45 days | COMPLETE | 2/28/2018 | 2/13/2018 | No |
| Replace the broken well vent with a 24-mesh noncorrosive screen. | COMPLETE | 2/28/2018 | 2/13/2018 | No |
| Replace the broken screen with a new 24-mesh noncorrosive screen. | COMPLETE | 2/28/2018 | 2/13/2018 | No |
| Have the chlorine tank scale at Well 3 repaired/recalibrated. Recommend recalibrating the other sodium hypochlorite tanks at the other wells at the same time. | COMPLETE | 3/31/2018 | 11/20/2017 | No |

| Corrective Action | Status | Due Date | Completed | Violation |
|--|----------|------------|------------|-----------|
| Repair or replace the chlorine injector to stop any future leaks | COMPLETE | 3/31/2018 | 11/20/2017 | No |
| Reroute the air release discharge piping so that any discharge is redirected into the backwash pit | COMPLETE | 3/31/2018 | 2/13/2018 | No |
| Remove the cone structure on top of the vault to establish a free air break, making sure the overflow pipe terminates 12" above the remaining vault. | ACTIVE | 12/31/2018 | | No |
| Create an air gap for the backwash discharge system at Well 3. | ACTIVE | 12/31/2018 | | No |

Disinfection Byproducts

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|---------------------|------|-----|------|-------------|-------|--------------------------------|-----------|---|
| HAA5 (ppb) | D-14 | 60 | 60 | 0 | 0 | | No | By-product of drinking water chlorination |
| TTHM (ppb) | D-14 | 80 | 0 | 2.7 | 2.7 | | No | By-product of drinking water chlorination |

Inorganic Contaminants

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|-----------------------|------|-----|------|-------------|-----------------|--------------------------------|-----------|--|
| ANTIMONY TOTAL (ppb) | | 6 | 6 | 0.2 | 0.0 - 0.2 | | No | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder |
| BARIUM (ppm) | | 2 | 2 | 0.092 | 0.057 - 0.092 | | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| FLUORIDE (ppm) | | 4 | 4 | 0.4 | 0.3 - 0.4 | | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| NICKEL (ppb) | | 100 | | 2.3000 | 0.8700 - 2.3000 | | No | Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products. |
| NITRATE (N03-N) (ppm) | | 10 | 10 | 0.14 | 0.07 - 0.14 | | No | Runoff from fertilizer use; Leaching from septic tanks, |

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|------------------------------------|------|-----|------|-------------|---------------|--------------------------------|-----------|---|
| | | | | | | | | sewage; Erosion of natural deposits |
| NITRITE (NO ₂ -N) (ppm) | | 1 | 1 | 0.088 | 0.000 - 0.088 | | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| SODIUM (ppm) | | n/a | n/a | 18.00 | 13.00 - 18.00 | | No | n/a |

| Contaminant (units) | Action Level | MCLG | 90th Percentile Level Found | # of Results | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|---------------------|--------------|------|-----------------------------|--|--------------------------------|-----------|--|
| COPPER (ppm) | AL=1.3 | 1.3 | 0.3100 | 0 of 20 results were above the action level. | | No | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| LEAD (ppb) | AL=15 | 0 | 13.00 | 0 of 20 results were above the action level. | | No | Corrosion of household plumbing systems; Erosion of natural deposits |

Radioactive Contaminants

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|----------------------------------|------|-----|------|-------------|-----------|--------------------------------|-----------|-------------------------------|
| GROSS ALPHA, EXCL. R & U (pCi/l) | | 15 | 0 | 4.4 | 0.0 - 4.4 | | No | Erosion of natural deposits |
| RADIUM, (226 + 228) (pCi/l) | | 5 | 0 | 4.2 | 3.0 - 4.2 | | No | Erosion of natural deposits |
| GROSS ALPHA, INCL. R & U (n/a) | | n/a | n/a | 4.4 | 0.0 - 4.4 | | No | Erosion of natural deposits |

Additional Health Information

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. Mayville Waterworks 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 www.epa.gov/safewater/lead.

Other Compliance

Reporting Violations

| Description | Due Date | Submitted Date |
|--------------------------------------|------------|----------------|
| L1/L2 Assessment Form Submitted Late | 11/14/2017 | 1/23/2018 |

We are required to report monitoring results and Total Coliform Rule Assessment completion to DNR in a timely manner. Monitoring results and required assessments are an indicator of whether or not your drinking water meets health standards. We received violations for not reporting the information in the above table by the date required. Although public health was not impacted, as our customers, you have a right to know what happened and what we did to correct the situation.

Actions Taken

The Utility has a procedure in place to assure that any violations are reported as required.