

2017 Consumer Confidence Report Data OREGON WATERWORKS, PWS ID: 11302511

Introduction

We are happy to present the 2017 Annual Water Quality Report. This report summarizes testing completed on our municipal water system in 2017 and also confirms our level of commitment to our residents in providing a safe and dependable supply of drinking water.

The Village of Oregon operates the water system with two full-time employees licensed through the State of Wisconsin Department of Water Resources (DNR). These employees are responsible for the day to day operation of the system, repairs, maintenance, and water sampling, and testing. The testing program includes daily testing within the system of fluoride levels, twice weekly testing of chlorine levels, and ten (10) bacteria tests monthly. Testing is completed by the State Laboratory of Hygiene. Each of the three groundwater wells are tested quarterly for bacteria. Our water personnel and public works staff are committed to maintaining over 50 miles of water mains, over 530 fire hydrants, and over 740 water valves.

In addition to our three groundwater wells, we monitor and maintain three underground reservoirs, two vertical standpipes, and one elevated tower. The storage capacity of our reservoirs and tanks are approximately 1.36 million gallons, on reserve for our residents and fire protection. In 2017 the Village of Oregon pumped over 283 million gallons of water.

In 2015, the issues surrounding lead pipe water laterals in Flint, Michigan raised the public awareness of lead in drinking water. The Village continues to sample and test water from lead services within the Village. The Village is committed to requiring the removal of lead services when outdated water mains are replaced.

We are pleased to report that our drinking water is safe and meets federal and state requirements.

Water System Information

If you would like to know more about the information contained in this report, please contact Don Gray at (608) 835-6294.

Opportunity for Input on Decisions Affecting your Water Quality

We want our valued customers to be informed about their Water Utility. If you want to learn more, please attend any of our regularly scheduled Public Works Meetings. They are normally held on the fourth Monday of each month at 117 Spring Street and begin at 5:45 p.m. Please call the Village Clerk's office to verify meeting date and time (835-3118).

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 from their health care providers about drinking water. 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 |
|-----------|-------------|-----------------|--------|
| 3 | Groundwater | 953 | Active |
| 4 | Groundwater | 853 | Active |
| 5 | Groundwater | 890 | Active |

To obtain a summary of the source water assessment please contact, Don Gray at (608) 835-6294.

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 |

| Term | Definition |
|-------------|--|
| | 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 |
| 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.

Disinfection Byproducts

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|---------------------|------|-----|------|-------------|-------|--------------------------------|-----------|---|
| HAA5 (ppb) | D-32 | 60 | 60 | 0 | 0 | | No | By-product of drinking water chlorination |
| TTHM (ppb) | D-32 | 80 | 0 | 4.8 | 4.8 | | No | By-product of drinking water chlorination |
| HAA5 (ppb) | D-33 | 60 | 60 | 0 | 0 | | No | By-product of drinking water chlorination |
| TTHM (ppb) | D-33 | 80 | 0 | 0.0 | 0.0 | | 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 |
|-----------------------|------|-----|------|-------------|---------------|--------------------------------|-----------|---|
| BARIUM (ppm) | | 2 | 2 | 0.028 | 0.013 - 0.028 | | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| CHROMIUM (ppb) | | 100 | 100 | 2 | 2 - 2 | | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| FLUORIDE (ppm) | | 4 | 4 | 0.1 | 0.1 - 0.1 | | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| NITRATE (NO3-N) (ppm) | | 10 | 10 | 4.53 | 1.95 - 6.02 | | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; |

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|---------------------|------|-----|------|-------------|-------------|--------------------------------|-----------|-------------------------------|
| | | | | | | | | Erosion of natural deposits |
| SODIUM (ppm) | | n/a | n/a | 4.15 | 2.75 - 4.15 | | 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 | 0.1740 | 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 | 4.90 | 1 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 | 0.9 | 0.9 | | No | Erosion of natural deposits |
| RADIUM, (226 + 228) (pCi/l) | | 5 | 0 | 1.4 | 1.4 | | No | Erosion of natural deposits |
| GROSS ALPHA, INCL. R & U (n/a) | | n/a | n/a | 2.2 | 2.2 | | No | Erosion of natural deposits |

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|-------------------------|------|-----|------|-------------|-----------|--------------------------------|-----------|-------------------------------|
| COMBINED URANIUM (ug/l) | | 30 | 0 | 0.9 | 0.6 - 0.9 | | No | Erosion of natural deposits |

Synthetic Organic Contaminants including Pesticides and Herbicides

| Contaminant (units) | Site | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2017) | Violation | Typical Source of Contaminant |
|---------------------|------|-----|------|-------------|-----------|--------------------------------|-----------|---|
| ATRAZINE (ppb) | | 3 | 3 | 0.0 | 0.0 - 0.0 | | No | Runoff from herbicide used on row crops |

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

No unregulated contaminants are present.

Health Effects For Any Contaminants With MCL Violations/Action Level Exceedances

Contaminant Health Effects

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.

Additional Health Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may

rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

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. Oregon 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.

Presence of Other Contaminants

None

Other Compliance

Violation of the Terms of a Variance, Exemption, or Administrative or Judicial Order

None

Noncompliance with Recordkeeping and Compliance Data

None

Additional Information

Lawn Irrigation Reminder

Many newer homes are being installed with underground sprinkler systems. These systems, when operated correctly can efficiently use water. Sprinkler systems can also be a significant waste of water if sprinklers are allowed to run excessively or if watering continues during wet periods. Also, watering should be done early in the morning or later in the evening to reduce the amount of evaporation. Typical lawns require approximately 1-inch of irrigation per week during hot/dry periods.

Water Hardness

Throughout Oregon and South-Central Wisconsin, we experience relatively “hard” water. The hardness of the Village of Oregon is about 18.25 grains which is equivalent to 331 ppm. Water hardness is a measure of the amount of calcium and magnesium minerals in the water. Hard water can cause mineral buildup on water fixtures, shower heads, toilets, etc. Water from the Village of Oregon system responds well to home water softening devices. It is recommended that you check your water softener regularly and have it evaluated if you notice any problems.

If You Have Water Problems

Our water system operators and public works staff are here to maintain and operate your municipal water system. We also rely on our residents to be our eyes and ears to help report problems you may experience. Be sure to contact the Village of Oregon Utility if:

- Your water pressure is low,
- Your water is discolored after running the tap for 15-30 seconds,
- You notice water coming out of the ground or running down the street,
- You are concerned with water quality or have questions concerning your water service lateral.

If you experience high water usage which you believe is in error, please contact public works and we can check your home’s plumbing for leaks or faulty fixtures or evaluate your water meter. If you experience a water problem on weekdays between 7:00 a.m. and 3:30 p.m., call (608) 835-6294 or 219-4822. If you experience a water problem on weekends or after hours, please contact the non-emergency police dispatcher at 835-3111. The dispatcher will contact a utility employee to check the problem.

Conclusion

Thank you for allowing us to serve you with clean, safe, affordable water. We are continuing to make improvements to the safety and operation of our system. Please help us by always keeping fire hydrants clear of snow and vegetation and maintain anti-siphon devices on all hose connections.

At the Village of Oregon, we are constantly working to provide top quality water to our customers. Please help us maintain the high quality of our groundwater through proper disposal of chemicals, medicines, waste oil, or other items which can affect our groundwater. Thank you for taking time to read this report and please contact our office if you have any questions or comments.

Jeffrey S. Rau, P.E.
Director of Public Works

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