

City of Oregon

Water Treatment Plant

2011 Water Quality Report

The Oregon Water Treatment Plant's drinking water continues to surpass all federal and state drinking-water standards.

This is the fourteenth annual report on the quality of water delivered by the City of Oregon. It meets the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports". Safe water is vital to our community. We have a current, unconditioned license to operate our water system. Please read this report carefully and, if you have any questions, call the numbers listed below.

Serving You With EXCELLENT Water Quality and Supply Is Our GOAL

If we can further assist in answering your questions regarding the water plant or any other water treatment issues, please call Doug Wagner, Superintendent of Water Treatment at 419-698-7123, between the hours of 7:30 AM and 4:00 PM weekdays or on the web at: www.oregonohio.org and follow the links to "The Departments", then to "The Utilities" and click on "The Water Plant" for our web page and E-mail link.

All contract or monetary decisions concerning the water plant are made at city council meetings held the second and fourth Mondays at 8:00 PM in Oregon Council Chambers. Meeting agendas are posted in the municipal building main hallway by the main door and also by following the link to "The City Council" on the city's web site: www.oregonohio.org



Source Water Assessment

The City of Oregon Public Water System uses surface water drawn from an intake located in Lake Erie near Reno Beach. For the purposes of source water assessments, all surface waters in Ohio are considered susceptible to contamination. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens, with relatively short travel times from source to intake.

Although the water system's main intake is located offshore in Lake Erie, the proximity of several onshore sources increases the susceptibility of the source water to contamination. The City of Oregon Public Water System's drinking water source protection area is susceptible to contamination from industrial wastewater, combined sewer or sewage treatment plant overflows, home sewage disposal system discharges, open water dredge disposal operations, runoff from agricultural and urban areas, oil and gas production and mining operations and accidental releases and spills, especially from commercial shipping operations and recreational boating.

The City of Oregon Public Water System treats water to meet drinking water quality standards, but no single treatment protocol can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in the City of Oregon Public Water System's Drinking Water Source Water Assessment report, which can be viewed by calling Doug Wagner, Superintendent of Water at 419-698-7123.

Water Quality Data Table

The table below lists all of the water contaminants that we detected during 2011. The presence of 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 in 2011. The Ohio EPA requires us to monitor for certain contaminants less than once per year because the concentrations of the contaminants do not change frequently.

| Contaminants (units) | MCLG | MCL | Detected | Range | Year | Violation | Typical Source |
|--|-------------|--------------|----------|----------------|------|-----------|---|
| Disinfectants & Disinfection By- Products | | | | | | | |
| Haloacetic Acids (ppb) [2] | NA | 60 | 14.72 | 5.3 - 22.6 | 2011 | NO | By-product of drinking water chlorination |
| Total Organic Carbon [3] | NA | TT | 1.9 | 0.0 - 3.2 | 2011 | NO | Naturally present in the environment |
| Trihalomethanes Total (ppb) [2] | NA | 80 | 51.6 | 20.2 - 73.5 | 2011 | NO | By-product of drinking water chlorination |
| Chlorine (as Cl ₂)(ppm)[2] | MRDL = 4 | MRDLG = 4 | 1.2 | 0.8 - 1.4 | 2011 | NO | Water additives used to control microbes |
| Chlorite (ppm) [4] | 0.8 | 1 | 0.059 | 0.027 - 0.110 | 2011 | NO | By-product of drinking water chlorination |
| Unregulated | | | | | | | |
| Bromodichloromethane (ppb) | NA | NA | 10.4 | 6.9 - 13.1 | 2011 | NO | By-product of drinking water chlorination |
| Bromoform (ppb) | NA | NA | 0.6 | ND - 1.3 | 2011 | NO | By-product of drinking water chlorination |
| Chloroform (ppb) | NA | NA | 36.0 | 7.1 - 53.6 | 2011 | NO | By-product of drinking water chlorination |
| Dibromochloromethane (ppb) | NA | NA | 4.7 | 2.5 - 6.1 | 2011 | NO | By-product of drinking water chlorination |
| Inorganic | | | | | | | |
| Fluoride (ppm) [1] | 4 | 4 | 1.09 | 0.53 - 1.14 | 2011 | NO | Erosion of natural deposits; Water additive which promote strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate [5] (measured as N) (ppm) | 10 | 10 | 5.29 | ND - 5.29 | 2011 | NO | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| Copper (ppm) | 1.3 | AL=1.3 | 0.034 | < .004 - 0.034 | 2011 | NO | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead (ppb) | 0 | AL=15 | 6 | < 4 - 9 | 2011 | NO | Erosion of natural deposits; Corrosion of household plumbing systems. |
| Barium (ppm) [6] | 2 | 2 | 0.010 | NA | 2011 | NO | Discharge of drilling wastes; Erosion of natural deposits; Discharge from metal refineries |
| Microbiological | | | | | | | |
| Turbidity (NTU) (in 95% of samples/month) | NA | TT <= 0.3 | 0.15 | 0.04 - 0.15 | 2011 | NO | Soil runoff |
| Turbidity (NTU) | NA | TT | 100% | 100% - 100% | 2011 | NO | Soil runoff |
| Synthetic Organic | | | | | | | |
| (% meeting standard) | | | | | | | |
| Atrazine (ppb) [2] | 3 | 3 | 0.43 | ND - 2.10 | 2011 | NO | Runoff from herbicides used on row crops |
| Simazine [2] | 4 | 4 | 0.028 | ND - 0.16 | 2011 | NO | Runoff from herbicides used on row crops |

1 Analyzed daily, detected limit is the highest for the year.

2 Detected level is the highest running average

3 The value detected for TOC is the lowest ratio between the % of TOC actually removed to the % required to be removed. A value of greater than 1 indicates that we are in compliance for TOC removal requirements.

4 Three samples analyzed per month, detected level is the highest monthly average.

5 Analyzed monthly, detected level is the highest for the year

6 One sample taken per year

7 Results collected between February 1, and August 31, 2009

Definitions:

NA: Not Applicable

ND: Not detected

<= : Less than or equal to.

NTU: Nephelometric Turbidity Units. Turbidity is a measurement of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration. The turbidity limit set by the EPA is 0.3 NTU on 95% of the daily samples and shall not exceed 1 NTU at any time.

MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCGLs allow for a margin of safety.

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.

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

AL: Action Level: the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MRDLG: Maximum Residual Disinfection 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.

MRDL: Maximum Residual Disinfection Level: The highest residual disinfectant level allowed

Required Additional 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 the 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). The sources of drinking water (both tap 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 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:

- (A) Inorganic contaminants, such as salts and metals, which can be naturally occurring minerals or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (B) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems
- (E) 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is 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 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* are available from the Safe Drinking Water Hotline (800-426-4791).

Lead in Drinking Water—If present, elevated levels of lead can cause serious health problem, 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 City of Oregon 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, test methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Nitrates in Drinking Water: Nitrate in drinking water at levels above 10 ppm is a health risk for infants 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.

IDSE: Under the Stage 2 Disinfectants/Disinfection By-products Rule (D/DBPR), our public water system was required by the USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection by-product concentrations. The locations selected for the IDSE may be used for compliance monitoring under the Stage 2 DBPR, beginning in 2013.

Disinfection by-products are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection by-products are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). The USEPA sets the standards for controlling the levels of disinfectants and disinfectant by-products in drinking water, including both TTHM and HAA5.

Minimizing Peak Daily Flow Rates

Even with our plant's expansion, water conservation is still very important. Housing developments in Oregon and our satellite communities, along with added industrial usage, has pushed our peak water consumption days past 150% of the original plants capacity. The expansion to 16 million gallons per day (MGD) that went online in November of 2004 has already supplied several 12 MGD plus peak days. Please help in conserving water. If you feel your lawn needs watering, instead of daily watering, give your grass a deep watering on a less frequent schedule. This should be done in the early morning or late afternoon to minimize evaporation and allow deeper water penetration. Did you know that mulch around trees and shrubs will tend to hold moisture longer and make your watering more effective? Maximize your wash loads of both clothes and dishes. Don't run the water while you shave or brush your teeth. If you insulate the hot water lines, they may stay warmer and you won't have to waste the water waiting for hot water when you open the faucet. If you are replacing toilet fixtures, look for a stool that uses water efficiently instead of 3 to 4 gallons per flush. Stop even small leaks through a toilet, they add up. Changing to a low volume shower head is an easy and inexpensive way of conserving water. These are a few of the many ways we can save water.

Customer Billing Benefits and Options

Contact the Water Office at 419-698-7039 for:

- 25% off water rates if you qualify for the real estate tax Homestead Credit
- Direct payment of Water / Sewer Bills from checking or savings
- Any differences in water meter and remote meter readings (avoid any billing surprises by periodically checking readings)
- No charge installation of an Electronic Reading Transmitter or ERT to broadcast your meter reading to our portable readers. There is no need for any external devices on your home. New installations and service calls will automatically be upgraded to this new service. Once installed there is no indoor access needed to read your water meter.
- You can now pay online or by telephone by using a credit card. This service has been added for the convenience of our citizens. Credit card payments can only be made through www.officialpayments.com online by choosing the "Local Payments" option, or by telephone at 1-800-272-9829 and choosing option #3. Follow the instructions that will be given after this point for either method. If you choose to make your payment via telephone, you will be asked for a jurisdiction code. The code that identifies the City of Oregon is 4551. Every transaction, whether by telephone or online will require your account number. This 10-digit number is located on your Water Utility Bill. If you are unsure of this number, please contact the Water Utility Department at 419-698-7039 for assistance. Credit card payment can not be made in person. Official Payments Corporation charges a nominal fee to the credit card holder for this service. The fee is \$4.95 and the transaction amount is limited to \$300.00. If you would like to make a payment larger than \$300.00, a second transaction will be needed. The Income Tax and Building / Zoning departments are also accepting credit card payments. If you wish to make a credit card payment to either of these departments, please contact them directly for instructions. The transaction fee varies by department.



Did You Know?

- A drop box is located outside the building entrance for your payments after hours.
- We automatically use your winter quarter's water consumption to calculate your sewer bill during summer's high water usage period. We just need an actual winter consumption reading.
- You can reach the water billing office Monday through Friday, 8:00 A.M. through 4:30 P.M. at 419-698-7039, or visit our web site at www.oregonohio.org, City Departments, Utilities for additional information about the water billing office, the water treatment plant and the water service serving our community.

Storm Water Management Plan

The City's Storm Drainage System is regulated by an Ohio EPA general permit, which requires a Storm Water Management Plan (SWMP). The SWMP outlines several Best Management Practices (BMPs) to address the storm water pollutants. The purpose of BMP's is to be proactive in not allowing pollutants to leave your property and enter the storm drainage system. Typical sources of pollutants are eroded soil from bare ground, excessively applied fertilizers and pesticides, pet waste, and household hazardous wastes. Efforts to control these pollutants can make a difference for our fresh water source.

- Grass cover should be maintained on soil as much as possible.
- Perform a soil test to ensure the proper rate of fertilizer is applied.
- If you must fertilize, use a zero or low phosphorus fertilizer and avoid spreading dry granules on sidewalks and driveways.
- Dispose of pet waste properly. Please pick up after your pet and put the animal waste in a trash bin. Dispose of the waste in a sealed bag.
- Don't pour any household hazardous waste in a catch basin. Tips for proper disposal can be found on the City's website.

The success of the Storm Water Management Program will not only help to improve the water quality of Maumee Bay for swimming and fishing, but will also help reduce water treatment costs. For more information about the Storm Water Management Program, please see our web site at www.oregonohio.org/Engineering/storm-water-management-plan.html or give us a call at (419) 698-7047.

Continuous Improvement

The City of Oregon has completed several projects in 2011 including the following;

- The Coy Road water tower has been repainted with a new mixing system and radio telemetry
- The 1500 KW diesel back-up generator at the water plant is complete providing additional back-up power during high water demand periods

Remember! Saving Water Saves Energy