



Calendar Year 2016 Water Quality Report Oklahoma State University Water System PWS 1020910

Energy Services is pleased to present the 2016 Annual Water Quality Report (Consumer Confidence Report) to provide details about where OSU water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last calendar year's water quality. We are committed to providing this information because informed customers are our best allies.

Where does my water come from?

OSU Stillwater is supplied potable water by the OSU Water Treatment Plant located west of campus at 226 South Pioneer. The Plant's raw water source is Lake Carl Blackwell, located approximately 6 miles west of Stillwater. Throughout 2016 the Water Treatment Plant supplied approximately 406 million gallons of drinking water to the campus.

The OSU Water Treatment Plant routinely monitors for numerous constituents in the drinking water according to Federal and State laws. We also participate in USEPA efforts to continually research methods to improve the effectiveness of water treatment and delivery.

For questions about this report or other information about the OSU Water Treatment Plant, call Freddy Pitts, OSU Water Treatment Plant Superintendent at (405) 744-4262.

The sources of all 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 human activity.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits to contaminants in bottled water. All 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.

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 storm water 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 storm water 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Important Health Information: Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 for infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, information about contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's Safe Drinking Water Hotline (800)-426-4791**.

OSU Water Treatment Plant Annual Water Quality Report for Calendar Year 2016

| Contaminants | MCLG | MCL | Your Water | Range | | Sample Date | Violation | Typical Source |
|---|--|-------------------|------------|------------------------|-------------|-------------|--|--|
| | | | | Low | High | | | |
| Disinfectants & Disinfection By-Products | | | | | | | | |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) | | | | | | | | |
| Haloacetic Acids (HAA5) (ppb) | | 60 | 18 | 11.1 | 61.5 | 2016 | No | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHMs) (ppb) | | 80 | 48 | 25.38 | 63.5 | 2016 | No | By-product of drinking water disinfection |
| Inorganic Contaminants | | | | | | | | |
| Barium (ppm) | 2 | 2 | 0.175 | 0.175 | 0.175 | 2016 | No | Discharge of drilling wastes and metal refineries; erosion of natural deposits. |
| Fluoride (ppm) | 4 | 4 | 1.28 | 0.16 | 1.28 | 2016 | No | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Nitrate (measured as Nitrogen) (ppm) | 10 | 10 | 0.48 | 0.48 | 0.48 | 2016 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Radioactive Contaminants | | | | | | | | |
| Beta/Photon emitters (pCi/gal) | 0 | 50 | 5.27 | 5.27 | 5.27 | 2014 | No | Decay of natural and man-made deposits. |
| Contaminants | MCLG | Action Level (AL) | Your Water | # Samples Exceeding AL | Sample Date | Exceeds AL | Typical Source | |
| Inorganic Contaminants | | | | | | | | |
| Copper - action level at consumer taps (ppm) | 1.3 | 1.3 | .116 | 0 | 2014 | No | Corrosion of household plumbing systems; erosion of natural deposits | |
| Lead - action level at consumer taps (ppb) | 0 | 15 | .997 | 0 | 2014 | No | Corrosion of household plumbing systems; erosion of natural deposits | |
| Unit Descriptions | | | | | | | | |
| ppm | parts per million, or milligrams per liter (mg/L) | | | | | | | |
| ppb | parts per billion, or micrograms per liter (µg/L) | | | | | | | |
| NA | not applicable | | | | | | | |
| ND | not detected | | | | | | | |
| NR | Monitoring not required, but recommended. | | | | | | | |
| positive samples | The number of positive samples taken that year. | | | | | | | |
| Important Drinking Water Definitions | | | | | | | | |
| 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. | | | | | | | |
| 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. | | | | | | | |
| Variances and Exemptions | State or EPA permission not to meet an MCL or a treatment technique under certain conditions. | | | | | | | |
| 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 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. | | | | | | | |
| MNR | Monitored Not Regulated | | | | | | | |
| MPL | State Assigned Maximum Permissible Level | | | | | | | |

*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. We 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 <http://www.epa.gov/safewater/lead>.*

While no detectable lead levels were found in OSU's water, we encourage users that are concerned, or meet the at-risk profile, to use the above guidelines to minimize any possible lead exposure.