

2017 WATER QUALITY REPORT FOR OSCEOLA WATER WORKS

This report contains important information regarding the water quality in our water system. The source of our water is surface water. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation Yes/No	Source
		Type	Value & (Range)			
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	30.00 (25 - 37)	06/30/2017	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	26.00 (23 - 27)	06/30/2017	No	By-products of drinking water disinfection
Copper (ppm)	AL=1.3 (1.3)	90th	0.37 (ND - 0.45)	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	ND	2015	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	3.2 (2.7 - 3.8)	12/31/2017	No	Water additive used to control microbes
01 - S/EP FROM WEST LAKE						
Fluoride (ppm)	4 (4)	SGL	.76 (.41 - 1.1)	04/17/2017	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.06	07/08/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	24	07/10/2017	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1.3	04/17/2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3 (3)	SGL	0.0003	01/11/2017	No	Runoff from herbicide used on row crops
Simazine (ppb)	4 (4)	SGL	0.0003	01/11/2016	No	Herbicide runoff
Turbidity (NTU)	N/A (N/A)	TT	.26 100% of annual turbidity samples met turbidity limits	7/22/17	No	Soil runoff

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (MCL) – 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.
- Maximum Contaminant Level Goal (MCLG) -- 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.

- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Residual Disinfectant Level Goal (MRDLG) - 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.
- Maximum Residual Disinfectant Level (MRDL) - 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.
- SGL – Single Sample Result
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric Turbidity Units

GENERAL 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 posed a health risk. More information about contaminants or 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 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* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. OSCEOLA WATER WORKS 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 <http://www.epa.gov/safewater/lead>.

OTHER VIOLATIONS

In March 2018 we had a Combined Filter Effluent (IESWTR) violation for Turbidity.

“Normal turbidity levels at our plant are below .1 NTU. A water sample taken 3/2/18 showed levels of 2.03 NTU. This was above the standard of 1 NTU. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.”

In March 2018 we had a Monthly Combined Filter Effluent (IESWTR) violation for Turbidity.

“Water samples for March, 2018, showed that approximately 22 percent of turbidity measurements were over .3 NTU - the standard is that no more than 5 percent of samples may exceed .3 NTU per month. The turbidity levels are relatively low. However, their persistence is a concern. Normal turbidity levels at our plant are below .1 NTU.”

A problem occurred with the treatment process at the water plant. On approximately 2/27/18 the ice melted off of West Lake which resulted in elevated levels of manganese in the raw water. The elevated manganese levels caused the turbidity to exceed .3 NTU. We adjusted the chlorine dioxide feed to control the increased demand of manganese. As of 3/7/18, turbidity levels have dropped below the standard of .3 NTU.

ADDITION HEALTH INFORMATION

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin.

Surface Water Name	Susceptibility
West Lake	high

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

CONTACT INFORMATION

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact OSCEOLA WATER WORKS at 641-342-1435. Decisions are made at the water board meetings held on the 1st Thursday of each month at 5:30 p.m. The meetings are at the Osceola Water Works office located at 208 West Jefferson Street in Osceola and the public is encouraged to attend. This information is being mailed to each customer. You can also receive a copy of this information at the Water Works office, online at www.osceolawaterworks.com, or online at www.iowaccr.org.