

# Consumer Confidence Report - 2015

## **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Last year, we conducted tests for over 80 contaminants. We only detected 4 of those contaminants, and found only 2 at a level higher than the EPA allows. As we informed you at the time, our water temporarily exceeded drinking water standards. (For more information see the section labeled Violations at the end of the report.)

## **Do I need to take special precautions?**

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## **Where does my water come from?**

OSU Institute of Technology purchases its water from the City of Okmulgee. The City of Okmulgee gets its water from Lake Okmulgee, which is then treated and sent to the campus through the city's water distribution system.

## **Source water assessment and its availability**

You may contact the City of Okmulgee at either 918-746-4060 (phone) or in person at 111 East 4th Street in downtown Okmulgee.

## **Why are there contaminants in my drinking water?**

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 (EPA) Safe Drinking Water Hotline (800-426-4791). 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:

microbial contaminants, such as viruses and bacteria, that 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; and 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## **How can I get involved?**

## **Water Conservation Tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.

- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

### **Monitoring and reporting of compliance data violations**

We failed to submit our operational evaluation level (OEL) report to our regulator. The report is needed to determine best treatment practices necessary to minimize possible future exceedences of HAA5 & TTHM. The report was submitted after the period had ended on the 24th of March. As we purchase our water from the City of Okmulgee, we have few options at this point. Health effects unknown.

### **Additional Information for Lead**

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. OSU Institute of Technology 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>.

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## **Water Quality Data Table**

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report.

Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	1.2	.7	1.2	2015	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	103	23.6	103	2015	Yes	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	259	31.7	259	2015	Yes	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>								
Copper - source water (ppm)	NA		.02	NA		2015	No	Corrosion of household plumbing systems; Erosion of natural deposits

<b>Violations and Exceedances</b>
<p><b>Haloacetic Acids (HAA5)</b>            Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated. For two periods of 2015, 07/01/2015 to 09/30/2015 and 10/01/2015 to 12/31/2015, the exceedances occurred at our two test points, HAA5_01 and TTHM_01. The MCL for this contaminant is 60 parts per billion (ppb). Our test results for the two points ranged from a high of 103 ppb to a low of 23.6 ppb over the two periods.</p> <p>These results are also used to determine the Locational Running Annual Average (LRAA), which is a measure of the overall contaminant level in the system over time. For the same periods as reported above, the LRAA for HAA5 in our distribution system was determined to be 67 ppb. The MCL is 60 ppb. OSU Institute of Technology (OSUIT) has worked closely with the City of Okmulgee to coordinate flushing of water lines on campus with the flushing the city lines. The thought was to clear the entire system of DBP. Unfortunately, the results of this aren't what the university was hoping. The city continues to look into different ways of disinfecting the water from Lake Okmulgee, to a system that doesn't use chlorine as the disinfectant. Until that happens, the university will still face the possibility of incurring violations of the DBP rule.</p>

<b>Violations and Exceedances</b>	
<b>TTHMs [Total Trihalomethanes]</b>	
<p>Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Water samples showed the the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the periods indicated. For three periods of 2015, 04/01/2015 to 06/30/2015, 07/01/2015 to 09/30/2015 and 10/01/2015 to 12/31/2015, the exceedances occurred at our two test points, HAA5_01 and TTHM_01. The MCL for this contaminant is 80 parts per billion (ppb). Our test results for the two points ranged from a high of 259 ppb to a low of 31.7 ppb over the three periods.</p> <p>These results are also used to determine the Locational Running Annual Average (LRAA), which is a measure of the overall contaminant level in the system over time. For the same periods as reported above, the LRAA for TTHM in our distribution system was determined to be 144 ppb. The MCL is 80 ppb. OSU Institute of Technology (OSUIT) has worked closely with the City of Okmulgee to coordinate flushing of water lines on campus with the flushing the city lines. The thought was to clear the entire system of DBP. Unfortunately, the results of this aren't what the university was hoping. The city continues to look into different ways of disinfecting the water from Lake Okmulgee, to a system that doesn't use chlorine as the disinfectant. Until that happens, the university will still face the possibility of incurring violations of the DBP rule.</p>	

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	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	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	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	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	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	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	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.

<b>Important Drinking Water Definitions</b>	
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

<b>For more information please contact:</b>
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