Southern Oklahoma Water Corporation 2017 CCR

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 17 of those contaminants, and found only 1 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?

SOWC treats water from the Lake of the Arbuckles and Lake Murray. We also have multiple groundwater wells around the system. We also purchase water from the City of Ardmore and their CCR is available upon request.

Source water assessment and its availability

N/A

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?

You can attend our Monthly Board meetings the first Thursday of every month at 6:00 pm at our office.

Monitoring and reporting of compliance data violations

We failed to notify ODEQ within 24 hours of a violation.

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. Southern Oklahoma Water Corporation 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.

Additional Information for Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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.

| | MCLG | MCL, | Detect In | Ra | ange | | | | |
|---|-------------|----------------|---------------|-----|------|----------------|-----------|---|--|
| Contaminants | or MRDLG | TT, or MRDL | Your Water | Low | High | Sample Date | Violation | Typical Source | |
| Disinfectants & Disinfection By-Products | | | | | | | | | |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) | | | | | | | | | |
| Chlorine (as Cl2) (ppm) | 4 | 4 | 2 | 1 | 2 | 2017 | No | Water additive used to control microbes | |
| Haloacetic Acids (HAA5) (ppb) | NA | 60 | 52 | NA | 140 | 2017 | No | By-product of drinking water chlorination | |
| , , , , , | | | | | | | | | |

| | MCLG | MCL, | Detect In | Ra | ange | | | |
|---|-------------|-------------|---------------|------|------|----------------|-----------|---|
| Contaminants | or MRDLG | TT, or MRDL | Your Water | Low | High | Sample Date | Violation | Typical Source |
| TTHMs [Total Trihalomethanes] (ppb) | NA | 80 | 85 | NA | 186 | 2017 | Yes | By-product of drinking water disinfection |
| Total Organic Carbon (% Removal) | NA | TT | 100 | NA | NA | 2017 | No | Naturally present in the environment |
| Inorganic Contamin | ants | | | | | | | |
| Arsenic (ppb) | 0 | 10 | 2 | NA | 2 | 2016 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| Barium (ppm) | 2 | 2 | .136 | .015 | .136 | 2016 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Fluoride (ppm) | 4 | 4 | .91 | .11 | .91 | 2016 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Mercury [Inorganic] (ppb) | 2 | 2 | .214 | NA | .214 | 2016 | No | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Nitrate [measured as Nitrogen] (ppm) | 10 | 10 | 3 | NA | 2.87 | 2017 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Selenium (ppb) | 50 | 50 | 1 | NA | 1 | 2016 | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| Microbiological Con | taminants | | | | | | | |
| Turbidity (NTU) | NA | 0.3 | NA | NA | NA | 2017 | No | Soil runoff |
| | | | | | | | | TT violation. The highest therwise approved by the state. |
| Radioactive Contam | inants | | | | | | | |
| Alpha emitters (pCi/L) | 0 | 15 | 2.33 | NA | 2.33 | 2017 | No | Erosion of natural deposits |
| Beta/photon emitters (pCi/L) | 0 | 50 | 5.08 | NA | 5.08 | 2017 | No | Decay of natural and man- made deposits. |
| Radium (combined 226/228) (pCi/L) | 0 | 5 | 3.34 | NA | 3.34 | 2016 | No | Erosion of natural deposits |
| Volatile Organic Co | ntaminant | s | | | | | | |
| | 1 | | | 1 | | 1 | 1 | |

| Contaminants Toluene (ppm) | MCLG or MRDLG | | MCL, TT, or MRDL | | Detect In Your Water | Ra Low | High | Sampl Date 2016 | Violatio | Typical Source Discharge from petroleum |
|---|---------------------|-----|------------------------|-----|-------------------------------|----------------|------|-----------------------|---------------|--|
| Contaminants Inorganic Contamin | ants | MCI | L G | AL | | Sample Date | | nples eding L | Exceeds AL | factories Typical Source |
| Copper - action level at consumer taps (ppm) | | 1.3 | 3 | 1.3 | .102 | 2015 | (|) | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| Inorganic Contamin | ants | | | | | | | | | |
| Lead - action level at consumer taps (ppb) | | 0 | | 15 | 0 | 2015 | 2 | 2 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

Violations and Exceedances

TTHMs [Total Trihalomethanes]

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. This violation occurred for all of the year 2017.

We are working with our engineer to solve the problem. We have tried different treatment chemicals as well as adjusted our treatment processes. We are continuing to search for a solution.

| Unit Descriptions | | | | | | |
|-------------------|--|--|--|--|--|--|
| Term | Definition | | | | | |
| ppm | ppm: parts per million, or milligrams per liter (mg/L) | | | | | |
| ppb | ppb: parts per billion, or micrograms per liter (μg/L) | | | | | |
| pCi/L | pCi/L: picocuries per liter (a measure of radioactivity) | | | | | |
| NTU | NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. | | | | | |
| NA | NA: not applicable | | | | | |
| ND | ND: Not detected | | | | | |
| NR | NR: Monitoring not required, but recommended. | | | | | |

| mportant Drinking Water Definitions | | | | | | |
|-------------------------------------|---|--|--|--|--|--|
| Term | Definition | | | | | |
| 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 | | | | | | |

| Important Drinking Water Definitions | | | | | |
|--------------------------------------|---|--|--|--|--|
| | 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. | | | | |
| MNR | MNR: Monitored Not Regulated | | | | |
| MPL | MPL: State Assigned Maximum Permissible Level | | | | |

For more information please contact:

Contact Name: Roger Dethloff Address: 1967 Sam Noble Pkwy Ardmore, OK 73401 Phone: 580-223-8961