# Pittsburg County RWD #14(OK1020625) CCR 2016

## 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 11 of those contaminants, and found only 3 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). 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? Your water comes from Lake Eufaula.

Source water assessment and its availability: Source water assessment is not available at this time.

## 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). 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 get involved by coming to the monthly broad meeting.

## Monitoring and reporting of compliance data violations: We failed to test our drinking water for turbidity during February, March, April, July and December of 2016. Because of this failure, we cannot be sure of the quality of our drinking water.

## 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. Pittsburg County RWD #14 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. 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. Pittsburg County RWD #14 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>.

## Total Organic Carbon (TOC) Explanation: Our treatment plant failed to adequately reduce the TOC of our source water which is needed to properly minimize the amount of DBP in our drinking water.

### 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** | **MCLGorMRDLG** | **MCL,TT, orMRDL** | **Detect InYour Water** | **Range** | **SampleDate** | **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) |
| Chlorine (as Cl2) (ppm) | 4 | 4 | 1 | 1 | 1 | 2016 | No | Water additive used to control microbes. |
| Haloacetic Acids (HAA5) (ppb) | NA | 60 | 62 | 28.8 | 84.7 | 2016 | Yes | By-product of drinking water chlorination. |
| TTHMs [Total Trihalomethanes] (ppb) | NA | 80 | 103 | 48.3 | 124.8 | 2016 | Yes | By-product of drinking water disinfection. |
| Total Organic Carbon (% Removal) | NA | TT | NA | NA | NA | 2016 | Yes | Naturally present in the environment |
| **Inorganic Contaminants** |
| Barium (ppm) | 2 | 2 | .0452 | NA | NA | 2013 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Nitrate [measured as Nitrogen] (ppm) | 10 | 10 | .2 | NA | NA | 2015 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Microbiological Contaminants** |
| Total Coliform (TCR) (positive samples/month) | 0 | 1 | 1 | NA | NA | 2016 | No | Naturally present in the environment |
| Turbidity (NTU) | NA | 0.3 | 6 | NA | NA | 2016 | Yes | Soil runoff |
| 6% of the samples were below the TT value of .3. A value less than 95% constitutes a TT violation. The highest single measurement was 1.5. Any measurement in excess of 1 is a violation unless otherwise approved by the state. |
| **Radioactive Contaminants** |
| Beta/photon emitters (pCi/L) | 0 | 50 | 4.3 | NA | NA | 2013 | No | Decay of natural and man-made deposits. |

| **Contaminants** | **MCLG** | **AL** | **YourWater** | **SampleDate** | **# SamplesExceeding AL** | **Exceeds AL** | **Typical Source** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Inorganic Contaminants** |
| Copper - action level at consumer taps (ppm) | 1.3 | 1.3 | 1.26981 | 2016 | 1 | No | Corrosion of household plumbing systems; Erosion of natural deposits; Corrosion of household plumbing system. |
| **Inorganic Contaminants** |
| Lead - action level at consumer taps (ppb) | 0 | 15 | 2.03 | 2016 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits. |

| **Violations and Exceedances** |
| --- |
| **Haloacetic Acids (HAA5)**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 HAA5 in our drinking water was above its standard (MCL) for fourth quarter of 2016. We are connecting to another water system. |
| **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. Water samples showed that the amount of TTHM in our drinking water was above its standard (MCL) for third quarter of 2016 and fourth quarter of 2016. We are working to connect to a new water system and better operate the water system. |
| **Turbidity**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 that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Turbidity levels, though relatively low, exceeded a standard for January, February and March 2016. One turbidity measurement exceeded a standard for January, February and March 2016. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water. We are working to connect to a new water system and better operate the water system. |

### Undetected Contaminants: The following contaminants were monitored for, but not detected, in your water.

| **Contaminants** | **MCLGorMRDLG** | **MCL,TT, orMRDL** | **YourWater** | **Violation** | **Typical Source** |
| --- | --- | --- | --- | --- | --- |
| 1,1,1-Trichloroethane (ppb) | 200 | 200 | ND | No | Discharge from metal degreasing sites and other factories |
| 1,1,2-Trichloroethane (ppb) | 3 | 5 | ND | No | Discharge from industrial chemical factories |
| 1,1-Dichloroethylene (ppb) | 7 | 7 | ND | No | Discharge from industrial chemical factories |
| 1,2,4-Trichlorobenzene (ppb) | 70 | 70 | ND | No | Discharge from textile-finishing factories |
| 1,2-Dichloroethane (ppb) | 0 | 5 | ND | No | Discharge from industrial chemical factories |
| 1,2-Dichloropropane (ppb) | 0 | 5 | ND | No | Discharge from industrial chemical factories |
| Alpha emitters (pCi/L) | 0 | 15 | ND | No | Erosion of natural deposits |
| Antimony (ppb) | 6 | 6 | ND | No | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition. |
| Benzene (ppb) | 0 | 5 | ND | No | Discharge from factories; Leaching from gas storage tanks and landfills |
| Beryllium (ppb) | 4 | 4 | ND | No | Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries |
| Cadmium (ppb) | 5 | 5 | ND | No | Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints |
| Carbon Tetrachloride (ppb) | 0 | 5 | ND | No | Discharge from chemical plants and other industrial activities |
| Chlorobenzene (monochlorobenzene) (ppb) | 100 | 100 | ND | No | Discharge from chemical and agricultural chemical factories |
| Chromium (ppb) | 100 | 100 | ND | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| Dichloromethane (ppb) | 0 | 5 | ND | No | Discharge from pharmaceutical and chemical factories |
| Ethylbenzene (ppb) | 700 | 700 | ND | No | Discharge from petroleum refineries |
| Fluoride (ppm) | 4 | 4 | ND | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Mercury [Inorganic] (ppb) | 2 | 2 | ND | No | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Radium (combined 226/228) (pCi/L) | 0 | 5 | ND | No | Erosion of natural deposits |
| Selenium (ppb) | 50 | 50 | ND | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| Styrene (ppb) | 100 | 100 | ND | No | Discharge from rubber and plastic factories; Leaching from landfills |
| Tetrachloroethylene (ppb) | 0 | 5 | ND | No | Discharge from factories and dry cleaners |
| Thallium (ppb) | .5 | 2 | ND | No | Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories |
| Toluene (ppm) | 1 | 1 | ND | No | Discharge from petroleum factories |
| Trichloroethylene (ppb) | 0 | 5 | ND | No | Discharge from metal degreasing sites and other factories |
| Uranium (ug/L) | 0 | 30 | ND | No | Erosion of natural deposits |
| Vinyl Chloride (ppb) | 0 | 2 | ND | No | Leaching from PVC piping; Discharge from plastics factories |
| Xylenes (ppm) | 10 | 10 | ND | No | Discharge from petroleum factories; Discharge from chemical factories |
| cis-1,2-Dichloroethylene (ppb) | 70 | 70 | ND | No | Discharge from industrial chemical factories |
| o-Dichlorobenzene (ppb) | 600 | 600 | ND | No | Discharge from industrial chemical factories |
| p-Dichlorobenzene (ppb) | 75 | 75 | ND | No | Discharge from industrial chemical factories |
| tras-1,2-Dichloroethylene (ppb) | 100 | 100 | ND | No | Discharge from industrial chemical factories |
| **Unit Descriptions** |
| **Term** | **Definition** |
| ug/L | ug/L : Number of micrograms of substance in one liter of water |
| 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. |
| positive samples/month | positive samples/month: Number of samples taken monthly that were found to be positive |
| NA | NA: not applicable |
| ND | ND: Not detected |
| NR | NR: Monitoring not required, but recommended. |

| **Important Drinking Water Definitions** |
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| **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 | 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 |

| **TT Violation** | **Explanation** | **Length** | **Health Effects Language** | **Explanation and Comment** |
| --- | --- | --- | --- | --- |
| Surface water treatment rule filtration and disinfection violations | Our turbidity levels exceeded levels allowed. | Violation occur from January 2016 through March 2016. | Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. | System is currently working on connecting to another water system. |
| **For more information please contact:** |

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