# 2016 WATER QUALITY REPORT

## Our Water Meets or Exceeds All Drinking Water Standards

WATER GAS WASTEWATER DPU

**Your Utility Source**

## Where does my water come from?

The Department of Public Utilities obtains its raw water from the North Fork Edisto River. The high quality and abundant quantity provides for future community and economic development. Our water treatment plant processes an average of 8 million gallons per day (MGD) and has the capability to treat 30 MGD.

A Source Water Assessment was performed by SCDHEC and results are available by visiting the web site www.scdhec.net/eqc/water.html/srcewtr.html or by calling the Water Division at 803-268-4404.


photo credit: Clayton Bozard

## Availability of monitoring data for unregulated contaminants for Orangeburg DPU

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by the Environmental Protection Agency. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Mr. Odom at 803-268-4404.

**In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.**

photo credit: Dhaya Garvin


## Why are there contaminants in the 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 the water poses a health risk. The sources of drinking water (both tap 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 radioactive material, and can pick up substances resulting from the presence of animals or human activity. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800-426-4791).

photo credit: Dhaya Garvin

## 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, or wildlife.

***Inorganic contaminants***, such as salts and metals, which can be naturally occurring, may 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 may also come from gas stations, urban stormwater runoff and septic systems.

***Radioactive contaminants***, which can be naturally occurring or may be the result of oil and gas production and mining activities.

photo credit: Clayton Bozard

## Lead in drinking water... get in the know!

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. Orangeburg DPU 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, treatment methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at http://www.epa.gov/safewater/lead.

photo credit: Clayton Bozard

## Special Concerns

Some people may be more vulnerable to the 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 provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

Since 1993, the Department of Public Utilities has sampled at least annually for giardia and cryptosporidium using current analytical methods. These organisms have never been detected in our finished water.

photo credit: Dhaya Garvin

## Key to Tables

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MRDL = Maximum Residual Disinfectant Level

N/A = Not Applicable

ND = Not Detected

NTU = Nephelometric Turbidity Unit

P/A = Presence / Absence

PPB = Micrograms per liter or parts per billion or one ounce in 7,350,000 gallons of water

PPM = Milligrams per liter or parts per million or one ounce in 7,350 gallons of water

RAA = Running Annual Average

## How Do I Read This Table?

The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such substances, and a key to units of measurement.

***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.

***Action Level (AL)***: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

***Treatment Technique (TT):*** A required process intended to reduce the level of a contaminant in drinking water.

***Maximum Residual Disinfectant Level (MRDL):*** The highest level of disinfectant allowed in the drinking water. There is compelling evidence that addition of a disinfectant is necessary for control of microbial contaminants.

***Maximum Residual Disinfectant Level Goal (MRDLG):*** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

# 2016 Water Quality Data

| | Substance | Number of Tests | MCL | MCLG | Detected Level | Range | Major Sources | Meets EPA Standards |
|---|---|---|---|---|---|---|---|---|
| Inorganics | **Fluoride** (as tested by DHEC) (PPM) | 1 | 4 | 4 | 0.60 | 0.60 | Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories. | Yes |
| | **Fluoride** (as tested by our DHEC certified laboratory) (PPM) | 730 | 4 | 4 | 0.70 | 0.43 to 0.78 | Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories. | Yes |
| | **Nitrate** (PPM) | 1 | 10 | 10 | 0.43 | 0.43 | Run-off from fertilizer use; Leaching from septic tank sewage; Erosion from natural deposits. | Yes |
| Volatile Organics | **Total Trihalomethanes** (PPB) | 4 | 80 | N/A | LRAA=21 | 12.5 to 30.8 | By-product of drinking water disinfection. | Yes |
| | **Haloacetic Acids** (PPB) | 4 | 60 | N/A | LRAA=47 | 31.2 to 58.3 | By-product of drinking water disinfection. | Yes |
| Microbiological | **Total Coliform** (P/A) | 730 | Presence of coliform bacteria in >/= 5% of monthly samples. | 0 | 0.5% | 0.0 to 1.6% | Naturally present in the environment. | Yes |
| | **Turbidity** (NTU) | 2920 | TT = 1<br>TT = 95% of samples <0.3 | 0 | 0.06<br>100% | 0.04 to 0.14<br>100% | Soil runoff. | Yes |
| Disinfection By-Products | **Residual Chlorine** (PPM) | 718 | MRDL = 4 | MRDL = 4 | RAA=2.8 | 1.0 to 3.7 | Water additive used to control microbes. | Yes |
| | **Total Organic Carbon** (PPM) | 12 | TT | Required % removal 47.5% | Actual % removal 70.6% | Actual % removal range 62.4 to 77.6% | Naturally present in the environment. | Yes |

## 2016 Lead and Copper Data

| Substance | Number of Tests | Action Level | MCLG | 90th Percentile | Range | Number of Sites Above Action Level | Major Sources | Meets EPA Standards |
|---|---|---|---|---|---|---|---|---|
| **Lead**** (PPB) | 31 | AL = 15 | 0 | 3 | ND to 90 | 2 | Corrosion of household plumbing systems; Erosion of natural deposits. | Yes |
| **Copper**** (PPM) | 31 | AL = 1.3 | 0 | 0.086 | ND to 0.301 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. | Yes |

** Lead and copper samples are only required once every 3 years on the reduced monitoring plan. They are scheduled to be collected again in the summer of 2017.

photo credit: Clayton Bozard

*Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien, favor de llamar a Servivio del Cliente at 268-4186.*

## Our Water Meets or Exceeds All Drinking Water Standards


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### How To Contact Us:

Please call the Water Division at
Phone: 803-268-4404 or
Fax: 803-531-3803
or visit our website at:
**www.orbgdpu.com**

photo credit: Clayton Bozard