

# ***CONSUMER CONFIDENCE REPORT***

***Annual Drinking Water Quality Report  
Public Water System (SC0110001)  
CITY OF ABBEVILLE, S.C.  
June 2018***

Annual Water Quality Report for the period of **January 1, 2017 to December 31, 2017**

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

***Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.***

We're pleased to present to you this year's Annual Water Quality Report. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water . Our constant goal is to provide you with a safe and dependable supply of drinking water.

The source of drinking water used by ABBEVILLE CITY OF (System no. 0110001) is Surface Water from the Wilson Creek Branch of Richard Russell Lake.

Our Water Treatment Plant is within the city limits of Abbeville on 406 Vienna Street. Our plant is a conventional surface water treatment facility which is presently rated to produce 4.5 million gallons per day with a maximum production capacity of 9.0 million gallons per day. Our current production level is around 3.2 million gallons per day at peak.

We encourage the citizens of Abbeville to plan a visit to the Treatment Plant to see how the water you are supplied is treated. Please feel free to contact Eric Moats at 864-366-2427 to arrange a tour of the facility.

***We are pleased to report that our drinking water is safe and meets federal and state requirements.***

If you have any questions about this report or concerning your water utility, please contact Eric Moats at 864-366-2427. We want our valued customers to be informed about their water utility. If you have any problems or concerns please contact the City Manager at 864-366-2109 or attend a City Council Meeting which is held on the 2nd Tuesday of every month at 7:00pm in the Council Chambers of the Opera House at 100 Court Square, Abbeville, S.C.

## Source of Drinking Water

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.

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, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 agricultural, urban storm water 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 storm water runoff, and septic systems
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities

## DEFINITIONS

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Average or Avg.* – regulatory compliance with some MCLs are based on running annual averages (RAA) of monthly samples.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*Action Level or AL* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Maximum Contaminant Level or 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 or 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.

*Maximum Residual Disinfectant Level or MDRL* – 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.

N/A – not applicable

## TEST RESULTS

The City of Abbeville Water Treatment Plant routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of **January 1<sup>st</sup> to December 31<sup>st</sup>, 2017.**

| TEST RESULTS                        |              |                        |               |                                      |                  |      |   |  |
|-------------------------------------|--------------|------------------------|---------------|--------------------------------------|------------------|------|---|--|
| Contaminant                         | Year Sampled | Highest Level Detected | Violation Y/N | Range of Level Detected              | Unit Measurement | MCLG | MCL   | Likely Source of Contamination   |
| <b>Microbiological Contaminants</b> |              |                        |               |                                      |                  |      |   |  |
| 1. Total Coliform Bacteria          | 2017         | 0                      | N             | 0                                    | #/100 mls        | 0    | presence of coliform bacteria in 5% of monthly samples  | Naturally present in the environment   |
| 2. Fecal coliform and <i>E.coli</i> | 2017         | 0                      | N             | 0                                    | #/100 mls        | 0    | a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive | Human and animal fecal waste   |
| <b>Inorganic Contaminants</b>       |              |                        |               |                                      |                  |      |   |  |
| 4. Copper                           | 2016         | # Sites Over AL = 0    | N             | 90 <sup>th</sup> Percentile = 0.0380 | ppm              | 1.3  | AL=1.3  | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| 5. Fluoride                         | 2017         | 0.48                   | N             | 0.48-0.48                            | ppm              | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from                |
| 6. Lead                             | 2016         | ND                     | N             | 90 <sup>th</sup> percentile = 0.9900 | ppb              | 0    | AL=15   | Corrosion of household plumbing systems, erosion of natural deposits                                   |
| 7. Nitrate (as Nitrogen)            | 2017         | 0.71                   | N             | 0.71-0.71                            | ppm              | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits            |
| 8. Sodium                           | 2017         | 6.2                    | N             | 6.2-6.2                              | ppm              | N/A  | N/A   | Naturally present in the environment   |

| <b>Turbidity</b>   |                                   |                        |               |                                |                  |                       |     |   |
|--|-----------------------------------|------------------------|---------------|--------------------------------|------------------|-----------------------|-----|---|
|  | Limit<br>(Treatment<br>Technique) | Level Detected         | Violation     | Likely Source of Contamination |                  |                       |     |   |
| Highest single measurement   | 1 NTU                             | 0.47 NTU               | N             | Soil runoff.                   |                  |                       |     |   |
| Lowest monthly % meeting limit   | 0.3 NTU                           | 100.0%                 | N             | Soil runoff.                   |                  |                       |     |   |
| Turbidity is measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants. |                                   |                        |               |                                |                  |                       |     |   |
| <b>Organic Contaminants</b>  |                                   |                        |               |                                |                  |                       |     |   |
| Contaminant  | Year Sampled                      | Highest Level Detected | Violation Y/N | Range of Level Detected        | Unit Measurement | MCL G                 | MCL |   |
| 8. TTHM **<br>[Total trihalomethanes]  | 2017                              | 54                     | N             | Range =<br>26.5-<br>51.9       | ppb              | No goal for the total | 80  | By-product of drinking water disinfection |
| 9. HAA **<br>[Haloacetic Acids]  | 2017                              | 25                     | N             | Range =<br>13.3-<br>22.6       | ppb              | No goal for the total | 60  | By-product of drinking water disinfection |

| <b>Radiological Contaminants</b>            |         |      |   |               |       |               |             |  |
|---|---------|------|---|---------------|-------|---------------|-------------|--|
| 11. Gross alpha excluding radon and uranium | 5/28/14 | 0.1  | N | ND            | pCi/L | 0             | 15          | Erosion of natural deposits              |
| <b>Distribution System</b>                  |         |      |   |               |       |               |             |  |
| 12. Chlorine                                | 2017    | 1.50 | N | 0.06-<br>1.50 | ppm   | MRDL<br>G = 4 | MRDL =<br>4 | Water additive used to control microbes. |

\* Lowest monthly percentage for samples meeting Turbidity Limits is 100%

\*\* TTHM and HAA results are reported as a running annual average (RAA) for 4 quarters.

\*\*\* See definitions on previous page for clarifications of results.

\*\*\*\* MCL refers to "Maximum Contaminant Level"

## **Total Organic Carbon**

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

### **What do these Test Results mean?**

As you can see by the table, our system had one violation for TTHM sampling. We have learned through our extensive monitoring and testing that the one TTHM violation that occurred in 2016 has been successfully corrected. The drinking water has been tested for many other constituents that are not listed in the above table. In each case the constituent has not been found or is below the limit of detection. Only those constituents that have been detected are listed in the table.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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### **The Relationship of the Test Results and General Population Vulnerability to Contaminants.**

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 microbiological 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. We 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 thirty seconds to two 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>.

### **Source Water Assessment Plan**

Our Source Water Assessment Plan (SWAP) is available for review at internet site [www.scdhec.gov/water/html/screwtr.html](http://www.scdhec.gov/water/html/screwtr.html). If you have no internet access available to you, please contact Eric A. Moats at 1-(864)-366-2427 to review this document.

***Thank you for being our customer!!***

A copy of this report can be obtained at the Abbeville Public Utilities Billing Office located at 306 Cambridge Street, Abbeville, S.C. 29620. Office hours are M-F, 8:30am – 5:00pm.