

# 2017 Water Quality Report

## Valley Public Service Authority

### System # SC0220012

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water is purchased from Trolley Run Station, Beech Island Rural Community Water District and produced from 5 Valley Public Service Authority Wells located in the Middendorf Aquifer.

If you have any questions about this report or concerning your water utility, please contact Calvin Smith at 803-593-2053. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Monday of each month, except July and September, at 6:00 p.m., at our office, 442 Pine St., Gloverville, SC. July and September meetings are held on the second Monday of each month. Our Source Water Assessment Plan is available for your review at:

<http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/mindex.htm> .

If you do not have internet access, please contact Calvin Smith at 803-593-2053 to make arrangements to review this document.

Valley Public Service Authority routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2017. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find the following terms and abbreviations:

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

**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.

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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. 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.

**Maximum Contaminant Level Goal** - The "Goal" (MCLG) is 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 (MRDL)** - 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.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - 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.

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

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

## Valley Public Service Authority

### LEAD AND COPPER TEST RESULTS (2017)

Contaminant	Violation Y/N	90 <sup>th</sup> percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
Lead	N	0.97	ppb	15	0	Corrosion of household plumbing systems; erosion of natural deposits
Copper	N	0.42	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCL	MCLG	Likely Source of Contamination
Fluoride 2017	N	1.2 Range 0 - 1.2	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate 2017	N	1.7 Range 0.18-1.7	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium 2017	N	28 Range 2.7 – 28	ppm	n/a	n/a	Occurs naturally

#### Disinfectants and Disinfection By-Products

HAA5 (Haloacetic Acids) 2017	N	2.0 Range 0.0-1.6	ppb	60	0	By-product of drinking water disinfection
TTHM [Total trihalomethanes] 2017	N	5 Range 0.0-5.1	ppb	80	0	By-product of drinking water chlorination
Chlorine 2017	N	1.0 Range 0.6 – 0.93	ppm	MRDL= 4	MRDLG = 4	Water additive used to control microbes

#### Radionuclides

Combined radium 2017	N	RAA 2.25 Range 0 - 3.1	pCi/l	5	0	Erosion of natural deposits
Gross Alpha emitters 2017 - Excluding radon and uranium	N	RAA 1.255 Range 0 – 3.0	pCi/l	15	0	Erosion of natural deposits

<b>Beech Island Water</b>						
Nitrate 2017	N	1.8 Range 0.15 - 1.8	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	N	2.4 Range 1.2 – 2.4	ppm	n/a	n/a	Occurs Naturally
Combined Radium 2017	N	1.2 Range 0 – 1.2	pCi/l	5	0	Erosion of Natural Deposits
<b>Trolley Run Station</b>						
Nitrate 2017	N	.71 Range .71-.71	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

As you can see by the table, our system had no violations in 2017. 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. All 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 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 material and components associated with service lines and home plumbing. The Valley Public Service Authority 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 drinking 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>.

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.

# 2017 Water Quality Report

## Trolley Run Station Development

### System # SC0220016

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water is produced from 4 wells located in the Middendorf Aquifer and Valley PSA.

If you have any questions about this report or concerning your water utility, please contact Calvin Smith at 803-593-2053. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Monday of each month, except July and September, at 6:00 p.m., at our office, 442 Pine St., Gloverville, SC. July and September meetings are held on the second Monday of each month. Our Source Water Assessment Plan is available for your review at:

<http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/mindex.htm> .

If you do not have internet access, please contact Calvin Smith at 803-593-2053 to make arrangements to review this document.

Trolley Run Station Development (Valley Public Service Authority) routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2017. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find the following terms and abbreviations:

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

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**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.

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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. 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.

**Maximum Contaminant Level Goal** - The "Goal"(MCLG) is 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 (MRDL)** - 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.

**Maximum Residual Disinfectant Level Goal (MRDLG)** – 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.

**Picocuries per liter (pCi/l)** – Picocuries per liter is a measurement of the radioactivity in water.

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

## Trolley Run Station Development

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Nitrate 2017	N	.71 Range .71-.71	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Chlorine 2017	N	1.14 Range 0.70- 1.30	ppm	MRDL = 4	MRDLG = 4	Water additive used to control microbes

### LEAD AND COPPER TEST RESULTS (2017)

Contaminant	Violation Y/N	90 <sup>th</sup> percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
Lead	N	.56	ppb	15	0	Corrosion of household plumbing systems; erosion of natural deposits;
Copper	N	0.018	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

### Valley Public Service Authority

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCL	MCLG	Likely Source of Contamination
Fluoride 2017	N	1.2 Range 0 – 1.2	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate 2017	N	1.7 Range 0.18 – 1.7	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium 2017	N	28 Range 2.7 – 28	ppm	n/a	n/a	Occurs naturally
Chlorine 2017	N	1.0 Range 0.6 – 0.93	ppm	MRDL= 4	MRDLG= 4	Water additive used to control microbes

### Radionuclides

Combined Radium 2017	N	RAA 2.25 Range 0 – 3.1	pCi/l	5	0	Erosion of natural deposits
Gross Alpha Emitters 2017 – Excluding Radon and Uranium	N	RAA 1.255 Range 0 – 3.0	pCi/l	15	0	Erosion of natural deposits

As you can see by the table, our system had no violation in 2017. 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. All 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 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 material and components associated with service lines and home plumbing. The Trolley Run Station Development (Valley Public Service Authority) 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 drinking 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>.

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.

# 2017 Water Quality Report

## Graniteville/Vaucluse Water System

### Avondale Mills, Inc.

#### System #SC0240002

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The source of our water is purchased from Valley Public Service Authority and Trolley Run Station.

If you have any questions about this report or concerning your water utility, please contact Calvin Smith at 803-593-2053. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Monday of each month, except July and September, at 6:00 p.m., at our office, 442 Pine St., Gloverville, SC. July and September meetings are held on the second Monday of each month. Our Source Water Assessment Plan is available for your review at:

<http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/mindex.htm>

If you do not have internet access, please contact Calvin Smith at 803-593-2053 to make arrangements to review this document.

Graniteville/Vaucluse Water System routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2017. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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## Graniteville/Vaucluse Water System

<b>Lead and Copper Test Results (2015)</b>						
Contaminant	Violation Y/N	90 <sup>th</sup> percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
Copper	N	0.053	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	5.0	ppb	15	1	Corrosion of household plumbing systems, erosion of natural deposits

<b>Disinfectants and Disinfection By-Products</b>						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCL	MCLG	Likely Source of Contamination
Haloacetic acids (HAAs) 2017	N	2 Range 1.8 – 1.8	ppb	60	0	By-product of drinking water disinfectant
TTHM [Total trihalomethanes] 2017	N	8 Range 8.4-8.4	ppb	80	0	By-product of drinking water chlorination
Chlorine 2017	N	.89 Range .39-1.41	ppm	MRDL= 4	MRDLG = 4	Water additive used to control microbes

### Valley Public Service Authority

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCL	MCLG	Likely Source of Contamination
Fluoride 2017	N	1.2 Range 0 – 1.2	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate 2017	N	1.7 Range 0.18 – 1.7	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium 2017	N	28 Range 2.7 – 28	ppm	n/a	n/a	Occurs naturally
Chlorine 2017	N	1.0 Range 0.6 – 0.93	ppm	MRDL= 4	MRDLG= 4	Water additive used to control microbes

### Radionuclides

Combined Radium 2017	N	RAA 2.25 Range 0 – 3.1	pCi/l	5	0	Erosion of natural deposits
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