## Annual Drinking Water Quality Report City of York System #4610001 June 1, 2018

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality 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 sources are Lake Caldwell and Lake Carolyn. Access to Lake Caldwell is restricted to authorize personnel. This limits the susceptibility to potential sources of contamination. Our Source Water Assessment Plan is available for review at <a href="http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/">http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/</a> If you do not have internet access, please contact Terry Montgomery at 684-7172 to make arrangements to review this document. The City of York purchases 500,000 gallons additional water per day from York County. York County receives their water supply from the City of Rock Hill, which draws water from the Catawba River. The City of York routinely monitors for constituents in your drinking water according to Federal and State laws. The table shows the results of our monitoring for the period of January Ist to December 31st, 2017

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

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 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 residual disinfectant level goal or 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.

Maximum residual disinfectant level or 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.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

na: not applicable.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

## City of York 4610001

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation Y/N	Likely Source of Contamination
Copper	2017	1.3	1.3	0.029	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

**Regulated Contaminants** 

Regulated Contai	IIIIaiiis							
Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation Y/N	Likely Source of Contamination
Chlorine	2017	0.86	0.68-0.86	MRDL = 4	MRD LG =	ppm	N	Water additive used to control microbes
Haloacetic Acids (HAA5)*	2017	37	17.2 – 40.8	No goal for the total	60	ppb	N	By-product of drinking water chlorination.
Total Trihalomethanes (TThm)*	2017	69	33.3 – 78.5	No goal for the total	80	ppb	N	By-product of drinking water chlorination.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation Y/N	Likely Source of Contamination
Fluoride	2017	0.62	0.62 - 0.62	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.038	0.038- 0.038	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (unregulated)	2017	33	33-33	NA	NA	ppm	N	Erosion of natural deposits

<sup>\*</sup>EPA's MCL for fluoride is 4 ppm, however, our state has set a lower MCL to better protect human health.

Data in this report is from the most recent testing done in accordance with the regulations

**Turbidity** 

-	Limit (Treatment Technique)	Level Detected	Violation Y/N	Likely Source of Contamination
Highest single measurement	1 NTU	0.260 NTU	N	Soil runoff
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

Contaminant (Units)	MCL	MCLG	Level Found	Range Of Detections	Sample Date	Violation Y/N	Typical Source of Contaminant
Chlorine Dioxide ppb	MRDL= 800	MRDLG= 800	110	ND-160	2017	N	Water additive used to control microbes
Chlorite ppm	1	0.80	0.290	0.170-0.290	2017	N	By-product of drinking water chlorination
Total Organic Carbon ppm	TT	N/A	46.2 average removal 45% required	31.5-68.7	2017	N	Naturally present in the environment

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
DALAPON	2017	1.5	0-1.5	0	200	ppb	N	Runoff from herbicide used on rights of way.

Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

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Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	2017	0.61	0.61 - 0.61	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.38	0.38 -	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

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.

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 pickup 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 agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

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 EPAs Safe Drinking Water Hotline at (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.

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 microbial 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 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 you have any questions concerning this report or your water utility, please contact Public Works Director Terry Montgomery at 803-684-7172. We want our valued customers to be informed concerning their water utility. If you want to learn more, please attend any of our regularly scheduled Council meetings. They are held on the first Tuesday of each month at 6:00 p.m. at the City of York, City Hall.

"We at the City of York work around the clock to provide top quality water to every tap", stated Terry Montgomery "We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future".