



CITY OF NEWTON 2017 WATER QUALITY REPORT

*When the well is dry,
we know the worth of
water.*
Benjamin Franklin
(1706-1790)

The Newton Water Division provides operation & maintenance services for production, treatment, & distribution of drinking water for Newton. Some services are also provided to the Public Wholesale Water Supply District #17. The City Commission meets on the second and fourth Tuesdays at City Hall, 201 E. 6th St.

Newton’s water supply is ground water, coming from the Equus Beds, which is part of the High Plains Aquifer. This aquifer covers 174,000 square miles in CO, KS, NE, NM, OK, SD, TX and WY. It underlies an area of about 30,500 square miles in Kansas. It is the principle source of ground water for the High Plains region, which is one of the Nation’s most important agricultural areas.

Local government, public water systems, the State, and the EPA work together towards the goal of ensuring that all public water supplies are safe. Public water systems have a responsibility to maintain sound treatment works and water distribution networks. They are responsible for ensuring that the water they supply does not contain contaminants at levels higher than the law allows.

The U.S. Congress passed the Safe Drinking Water Act in 1974, and reauthorized it in 1986 and 1996. The EPA and States develop and enforce drinking water regulations to protect the public health. The City of Newton Water Division has published this information sheet for our customers so they can be assured of the good quality of the water they drink.

The City of Newton tests its water on a daily basis to assure our water meets or exceeds all government standards.

A MESSAGE FROM THE EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 infection. 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 (1-800-426-4791)**.

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 the water poses a health risk. More information about contaminants and potential health risk can be obtained by calling the **Safe Drinking Water Hotline (1-800-426-4791)**.

The sources of drinking water (both tap and bottled), include rivers, lakes, ponds, reservoirs, springs, and wells. As water travels over the ground, it dissolves naturally occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animal or from human activity. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amounts of certain contaminants in water provided by public water systems. FDA regulates limits for contaminants in bottled water, which must provide the same protection for public health.

CONTAMINANTS THAT MAY BE PRESENT IN ANY SOURCE WATER INCLUDE:

Microbiological - such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural, livestock operations and wildlife.

Inorganic – 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, stormwater runoff, and residential uses.

Organic chemical – including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

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

During the 2016 calendar year, we had no violation(s) of drinking water regulations

Este informe contiene informacion muy important sobre su aqua beber. Traduzcalo o hable con alguien que to entienda bien.

Water Maintenance 284-6080 Mission Water Treatment 284-6077 City Engineering 284-6020

Look for our web site at: www.newtonkansas.com

Contact person: Justin Vajnar, Superintendent

The City of Newton's water meets or exceeds all government standards.

IOC Regulated Inorganic * 03/2015	Newton mg/L	MCL mg/L	Likely source of contamination:
Arsenic	0.0048	0.010	Erosion of natural deposits.
Barium	0.16	2.000	Discharge from metal refineries.
Chromium	0.0017	0.100	Discharge from steel & pulp mills.
Fluoride	0.54	4.000	Natural deposits; water additive which promotes strong teeth. (Sample taken 5/16/2016)
Nitrate	4.9	10.000	Runoff from fertilizer use. (Sample taken 5/9/2016)
Selenium	0.0053	0.050	Erosion from natural deposits.

Disinfection Byproducts	Newton mg/L	MCL mg/L	Typical Source
Total Haloacetic Acid (HAA5)	0.008	0.060	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	0.049	0.080	By-product of drinking water chlorination.

IOC Secondary Contaminants 03/24/2015	Newton mg/L	SMCL mg/L	
Alkalinity, Total	250	300	
Calcium	90	200	
Chloride	40	250	
Conductivity @ 25C UMHOS/CM	710	1500	
Corrosivity	0.85	Lang	
Hardness, Total (As CaCO3)	270	400	
Magnesium	10	150	
Manganese	Non-detectable	0.05	
PH	8.1	8.5	
Phosphorus	0.087	5	
Potassium	1.4	100	
Silica	30	50	
Sodium	49	100	
Sulfate	44	250	
Solids, Total Dissolved	440	500	
Zinc	Non-detectable	5	

Radiological Contaminants	Newton pCi/L	MCL pCi/L	
Combined Radium (-226 & -228)	1.3	5	Erosion of natural deposits. (Sample taken 8/4/2015)

Microbiological Monthly	Result	MCL	
Coliform (TCR) (Collect 20/month)	0 samples returned as positive	MCL: Systems that collect less than 40 samples per month – no more than 1 positive monthly sample	Naturally present in the environment.

Lead and Copper 2013-2015	90th Percentile	Allowable	
Lead	0.001	0.0150	Natural/industrial deposits, plumbing, solder, brass alloy faucets.
Copper	0.62	1.3	Natural/industrial deposits, wood preservatives, plumbing.

The EPA has established pollutant-specific minimum testing schedules for public water systems.

- ❖ Volatile Organic VOC - Every three years.
- ❖ Inorganic/Metals IOC - Every three years.
- ❖ Lead/Copper - Every three years.
- ❖ Please note: Because of sampling schedules, results may be older than 1 year.

Inorganic Compounds (IOC) - consist of substances that do not have any carbon in their composition. Two major classes of inorganic compounds are metals and non-metals. Most of these IOCs occur naturally in the environment and are soluble in water. Because of this, they are potential contaminants of drinking water. Not all IOCs originate from natural mineral deposits. Industrial activities such as metal finishing, textile manufacturing, mining operations, electroplating, manufacturing of fertilizers, paints and glass also generate these contaminants.

Volatile Organic Compounds (VOC) - are commonly referred to as organic solvents. These compounds are generally found as constituents of many degreasers, industrial cleaners, spot/stain removers, paint thinners, in some paints, varnishes and lacquers, in many paint removers/strippers, in many pesticides/herbicides, in most dry cleaning chemicals, in many printing inks and printing press chemicals, in most petroleum products including many types of fuels. These chemicals can often be identified by their distinct aromatic smell. Most of these chemicals are flammable and toxic to varying degrees. Because of this, they are also a potential source of environmental pollution and pose a health hazard.

Radionuclides - Radiation occurs naturally and is readily present in the environment. Radiation in groundwater occurs mainly when the natural decay of uranium in rocks and soil comes in contact with groundwater. In most circumstances, this radiation occurs at such low levels as to be harmless to human health. Occasionally, in some areas of the state these radiation levels do occur at higher levels which may present a health risk. For this reason, regulation have been legislated requiring public water supply systems to monitor their water for radionuclides.

90th percentile - Value is calculated by first putting all samples in order from lowest to highest concentration and numbering them (1-lowest). Multiply number of samples by .09. The sample result with the number corresponding to this calculation is the 90th percentile.

Maximum Contaminant Level (MCL) - Certain chemicals and compounds have been identified as drinking water contaminants and harmful to human health when present at certain concentrations. Using scientific data, state and federal governments have set limits on the allowable concentration of each contaminant in drinking water. **Secondary Maximum Contaminant Level (SMCL)** - Recommended level for a contaminant that is not regulated and has no MCL.

mg/L - milligrams per liter - 1 part per million (-) - Not indicated at these levels **EPA** - Environmental Protection Agency **FDA** - Food and Drug Administration

pCi/L - .037 nuclear disintegration per sec. **Treatment Technique** - water treatment methods that are required to be performed in place of an MCL.