Annual Drinking Water Quality 2015

Romulus Water District

Hamlet of Romulus (Romulus Water District)
(Romulus WD - NY4920642)

Safety and security are our top priorities. The Romulus Water District strives to deliver safe drinking water to our customers and to keep the utility and system secure and protected. We are proud to deliver this annual report covering the year 2015.

Important Facts About Our Water!

Romulus Water District purchases water from the Village of Waterloo via the Seneca County Water District. The Village of Waterloo treats its water using state-of-the-art disinfection and filtration to remove or reduce harmful contaminants that may come from the source water, which includes cryptosporidium. Waterloo uses chlorine dioxide to disinfect and help oxidize organics and deter Zebra Mussels. Additionally, Waterloo adds activated carbon to adsorb organic contaminants in the raw water which help make the water taste better and provide an additional barrier of protection for the public water supply. The finished product is then redisinfected with chloramines before it leaves the water plant in order to maintain the distribution system's residual integrity. A Source Water Assessment of Waterloo's water supply is available upon request at the Seneca County Health Department, 31 Thurber Drive, Waterloo 13165, (315) 539-1945.

Where Can I Get More Information?

For more information about your source drinking water and for opportunities to get more involved, please contact Jim Bromka, NYS Grade IA & Grade D Certified Water Treatment Plant Operator and NYS & NELAP Certified Environmental Lab Director, by calling (315) 585-9811 or by writing to this address: PO Box 188, Waterloo, NY 13165. If you have questions concerning the water supply after it passes through our meter station please contact Robert Stapleton at 607-869-9326. Also, you are welcomed and encouraged to attend regular Town Board meetings on the third Wednesday of each month, 7:30 pm at the Romulus Town Hall. Or, you may visit us on the World Wide Web at: www.romulustown.com

Improvements and Changes in Disinfection & Operations:

The Village of Waterloo Water System uses chloramines (small but exact amounts of chlorine and ammonia which are added) instead of chlorine (free chlorine) to provide residual disinfection in your potable water supply distribution system. Chloramines are increasingly being applied by many utilities nationwide as a more effective disinfectant in the distribution system, as they persist in remote areas of the system, produce lower levels of by-products, and have the ability to minimize chlorinous or other objectionable tastes and odors.

Chloraminated water is safe for drinking, cooking, bathing, watering plants, and all the uses we have for water every day. However, there are two groups of people who need to take special care with chloraminated water: kidney dialysis patients and fish owners. Chloramines must be removed from water used in the kidney dialysis process and from water that is used in fish tanks or ponds, because chloramines are harmful when they go directly into the bloodstream. This includes fish/turtle/reptile aquarium water, lobster tanks at grocery stores and restaurants, as well as fish containers at bait shops.

Kidney dialysis patients should check with their physician who will recommend the best pretreatment to be used. Fish tank owners should consult with their local pet store for the best dechloramination agent or filter to use. Chloramines can be reduced by using a high quality granular activated carbon filter, but will not be reduced by a reverse osmosis unit or by letting water sit for a few days.

The commitment to your water quality does not end when water leaves the treatment plant. Water samples from homes and businesses throughout the water system are tested daily. We work closely with the Seneca County Health Department to test the water using approved NYSDOH & USEPA procedures.

If you have any questions, please contact your physician, pet store, or call us at the Water Dept. at 539-9131 or Water Plant Office 585-9811.

The Village of Waterloo 2015 Monitoring Results for Contaminants in Drinking Water 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 (1-800-426-4791).

Microbiological Contaminants							
Contaminant	**Violation (Yes/No)**	**Date of Sample**	**Level Detected**	**Unit**	**MCLG Health Goal**	**Regulatory Limit (MCL, TT or ACL)**	**Potential Source of Contamination**
Turbidity[1]	NO	6/5/15	0.52	NTU	1	5	Soil Runoff
Distribution Turbidity	NO	6/7/15	1.97	NTU	NA	5	Soil Runoff
Inorganic Contaminates							
Nitrate	NO	9/16/15	0.416 (single sample)	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural dep.
Nitrite	NO	9/16/15	0.0437	mg/L	1	1	Runoff from fertilizer use; Leaching from septic tanks, sew¬

							age; Erosion of natural dep.
Selenium	NO	8/5/14	1.4	ug/L	50	50	Naturally occurring
Sodium[2]	NO	9/16/15	75.0 (single sample)	mg/L	NA	250	Naturally occurring
Arsenic	NO	9/16/15	1.1	ug/L	0	0.010	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Antimony	NO	9/16/15	0.43	ug/L	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	NO	9/16/15	0.029	mg/L	2	2	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Copper[3]	NO	2013 (7/25-9/5/14)	0.700 (90th percentile) 0.028-0.850 (range)	mg/L	1.3	1.3=AL	Corrosion of plumbing systems; erosion of natural deposits.
Lead[3]	NO	2013 (7/25-9/5/14)	0.0093 (90th percentile) 0.0001-0.017 (range)	mg/L	0	15=AL	Corrosion of plumbing systems; erosion of natural deposits.
Fluoride [4b]	NO	9/16/15	0.110	mg/L	0.8-1.2	2.2	Erosion of natural deposits
Other							
Chlorine Dioxide	NO	9/25/15	722	ug/L	MRDLG=800	MRDL=800	Water additive used to control microbes. (Primary Disinfection).
Chlorite	NO	9/26/15	875	ug/L	1000	1000	Byproduct of drinking water disinfection
Chloramines	NO	9/7/15	3.43	mg/L	NA	4.00	Water additive used to control microbes. (Primary Disinfection).
Trihalomethanes (reduced to 1x/yr monitoring applies (Vill. Of Waterloo)	NO	8/17&18/15	7.67 max. 6.72 – 7.67 range	ug/L	0	80	Byproduct of drinking water disinfection MCL is 80
Haloacetic Acids (HAA5) (Vill. Of Waterloo)	NO	8/17&18/15	13.97 max 9.9 – 13.97 range	ug/L	NA	60	Byproduct of drinking water disinfection MCL is 60
Disinfection By-Products	NO	8/22/15	8.28 thm	ug/L	0	80	Byproduct of drinking water

(Romulus WD)			12 haa			60	disinfection
Other							
Cryptosporidium & Giardia	NO	2014	undetected	Oocysts/L Cysts/L	0	0	Raw water-borne parasites
NDMA (nitroso dimethylamine)	NO	2013	16	ng/L	0	to be determined	Byproducts of drinking water disinfection
Uranium	NO	2014	0.289	Ug/l	0	30	Erosion of natural deposits

All of our Water System Operators are New York State Department of Health certified to operate the water plant and/or water distribution system.

Are There Contaminants In Our Drinking Water?

According to State regulations, the Village of Waterloo routinely monitors your drinking water for various contaminants. Your water is tested for radiological contaminants, inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants and trihalomethanes. Additionally, your water is tested for E. coli, coliform, and other bacteria. Only the contaminants detected in your drinking water are included in the Table of Detected Contaminants.

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

In general, 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

4b The level shown in the chart is the natural level detected from Seneca Lake in 2015.

Definitions:
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 (or AL):*** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
Treatment Technique (or TT): A required process intended to reduce the level of a contaminant in drinking water.
90th Percentile: 90% of samples are equal to or less than the number in the chart.
NTU (or Nephelometric Turbidity Units): A measure of clarity.
NA: Not applicable.
ppt: (or parts per trillion): nanograms per liter (ng/l).
ppb: (or parts per billion): micrograms per liter (ug/l).
ppm: (or parts per million): milligrams per liter (mg/l).
pCi/L (or picocuries per liter): a measure of radioactivity.
MRDL: Maximum Residual Disinfectant Level.
MRDLG: Maximum Residual Disinfectant Level Goal.

NOTES:
1

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 6/5/15 at 0.52 NTU. State regulations require that turbidity samples collected have measurements below 5.00 NTU. All levels recorded were within the acceptable range allowed and did not constitute a treatment technique.

2

Water containing more than 20mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

3

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

4b

Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Water Conservation Tips

Water conservation measures not only save the supply of our water source, but can also cut the cost of water treatment. They can cut the energy costs at the treatment facility associated with pumping, and also chemical costs for processing of the water. There are a number of measures you as the water consumer can do to conserve on water usage.

Conservation measures you can use inside your home include:

1. 1. Fixing leaking faucets, pipes, toilets, etc.
2. 2. Installation of water-saving devices in faucets, toilets and appliances. Low flow fixtures are now the only kind produced since 1994. Simply replacing old fixtures with new will reduce water consumption by nearly one-half.
3. 3. Wash only full loads of laundry.
4. 4. Don't use the toilet for trash disposal.
5. 5. Take shorter showers. Do not let the water run while shaving, washing, brushing teeth, or cleaning fruits and vegetables.
6. 6. Soak dishes before washing. Run the dishwasher only when full.

You can conserve outdoors as well:

1. 1. Water the lawn and garden as little as possible. If you must water, do so in the early morning or evening.
2. 2. Use mulch around plants and shrubs or choose plants that don't need much water.
3. 3. Repair leaks in faucets and hoses. Use water-saving nozzles.
4. 4. Use water from a bucket to wash your car, and save the hose for rinsing.
5. 5. Sweep clippings and leaves from walks and driveways rather than using the hose.
6. 6. Obey any and all water bans or regulations.

Freeze Precautions:

1. 1. Eliminate drafts: keep basement and garage doors and windows tightly closed, close off crawl space vents and doors, and seal cracks in basement walls or crawl spaces.
2. 2. Insulate pipes in any unheated part of the home (exterior walls, crawl spaces, basements, cabinets) or spaces where air cannot circulate. Check for damp insulation; water-soaked insulation can cause freeze-ups.
3. 3. Protect water meter: Be sure the meter box cover is not broken, missing, or out of place. Report broken or missing covers to the Water & Sewer Services.
4. 4. Protect outside faucets. Drain outside faucets and sprinkler systems if a separate shut-off is available. Disconnect and drain garden hoses. Check with a plumber about frost-proof faucets. Caulk any space between the faucet and an outside wall.
5. 5. Open cabinet doors below sinks. If a sink is located against an outside wall, open cabinet doors to allow warm air to reach water pipes.
6. 6. Drain pipes before extended vacations.

Consumer Tips: Appearance:

*If your cold tap water appears brown or red it is probably mineral deposits in your water caused by:

1. 1. A water main break
2. 2. Water Dept. workers flushing a hydrant
3. 3. Vibrations caused by construction.

To alleviate this problem, call the water department if the cause is not obvious. Once the reason has been identified and the disruption of the water main has ceased, run your cold water tap until it clears.

*If your water appears cloudy in winter and early spring it is most likely trapped air. Cold water has a much greater capacity to hold gas than warm water and if this tendency is combined with a faucet aerator, your water may appear cloudy due to bubbles. If the water is allowed to sit a short while, the bubbles will eventually rise to the surface and dissipate.

Taste & Odor:

If at any time your water tastes different than normal, please do not hesitate to call the Water Treatment Plant at 585-9811. We will do our best to help you find the cause of the anomaly. With the exception of the annual late summer earthy/musty season due to increased blue-green algae in Seneca Lake, there should not be any reason for your water to taste like anything but plain water.

What Does This Information Mean?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

Summary of the SWAP (Source Water Assessment Program):

The NYS DOH has evaluated this PWS's (Public Water System's) susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph(s) below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards. This assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for phosphorus, DBP precursors, and pesticide contamination. While there is not a great density of permitted discharges in assessment area, the total amount of wastewater discharged from these facilities is high enough to raise the potential for contamination (particularly for protozoa). There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: CBS and landfills.

Is Our Water System Meeting Other Rules That Govern Operations?

During the 2015 operating year the Romulus Water District was in compliance with the NYS Sanitary Code and did not have any violations. The Village of Waterloo was in violation for failing to monitor for POC's. The health effects from this violation are unknown.

Town Supervisor:
David Kaiser

Water Operator:
Robert Stapleton