

# **Annual Drinking Water Quality Report for 2016**

## **South New Berlin Water District**

### **South New Berlin, NY 13843**

#### **(Public Water Supply ID#NY0801749)**

### **Introduction**

To comply with State regulations, South New Berlin Water District, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. To ensure enough quality water is available to the residents of South New Berlin a second well and a new treatment plant went online in 2015. We are proud to report that our system did not violate a maximum contaminant level. Our system was schedule to sample for gross alpha radiation during 2016 but this test was not completed. Gross alpha samples were collected at the beginning of 2017 and we are awaiting the results. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report, or concerning your drinking water, please contact, Town Clerk Debra Barker, (607) 847-8909. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled water district board meetings. The meetings are held the first Thursday of each month, at 7:30 pm in the South New Berlin Firehouse. Water District Board members also attend the Town of New Berlin Board meetings held on the second Monday of each month at 6:00 pm at the Town Offices.

### **Where does our water come from?**

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

Our water system serves approximately 400 individuals through 120 service connections including the former South Campus of Unadilla Valley Central School, the library, post office, Fire Department and several businesses. Our water sources are two drilled groundwater wells. Well number 2 (south well) is 263 feet deep and well number 3 (north well) is 270 feet deep. Both wells are located on land owned by the Town of New Berlin. The water enters the treatment plant and is treated with NSF approved potassium permanganate (Cairox F), this step aids in the removal of iron, manganese and hydrogen sulfide. The well water then flows through a series of filters designed to remove excess iron and manganese from the water. The water is then treated with, NSF approved, liquid Sodium Hypochlorite (bleach) as the disinfection agent. After treatment, the water is pumped into the hamlet and eventually to a 125,000 gallon covered concrete reservoir.

### **Are there contaminants in our drinking water?**

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, might be reasonably 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 (800-426-4791) or the Chenango County Health Department at (607-337-1673).

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Nitrate Well #2 (South Well)	No	1/21/16	0.08	mg/L	10	MCL = 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Lead	No	9/28/16	0.00169 <sup>1</sup> (<0.005-0.00222)	mg/L	0	AL= 0.015	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	No	9/28/16	0.115 <sup>1</sup> (0.0471-0.134)	mg/L	1.3	AL= 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Barium Well #2 (South Well)	No	8/15/15	0.044	mg/L	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Barium Well #3 (North Well)	No	8/15/15	0.058	mg/L	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Arsenic Well #2 (South Well)	No	8/15/15	0.0046	µg/L	n/a	MCL = 10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Arsenic Well #3 (North Well)	No	8/15/15	0.0034	µg/L	n/a	MCL = 10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Sodium Well #2 (South Well)	No	1/21/16	15.4 <sup>2</sup>	mg/L	n/a	n/a	Naturally occurring; Road salt; Water softeners; Animal waste
Sodium Well #3 (North Well)	No	12/29/16	13.4 <sup>2</sup>	mg/L	n/a	n/a	Naturally occurring; Road salt; Water softeners; Animal waste

Disinfection Byproducts							
Total Tri-Halomethanes LRAA1	No	8/31/16	7.0	µg/L	n/a	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Radiological							
Combined Radium (South Well)	No	1/21/16	0.618	PCi/L	n/a	MCL = 5	Erosion of natural deposits.

1-The level presented represents the 90<sup>th</sup> percentile of 5 tested sites. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system. The action levels for lead and copper were not exceeded at any of the test sites.

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

### 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.

**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.

**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 contamination.

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

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

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

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (µg/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

**Picograms per liter (pg/l):** Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

**Millirems per year (mrem/yr):** A measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL):** A measure of the presence of asbestos fibers longer than 10 micrometers.

### 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 the level allowed by the State.

### Is our water system meeting other rules that govern operations?

During 2016 our system was in compliance with applicable State drinking water operating and reporting requirements.

Due to an oversight, testing for gross alpha contaminates was not completed as required in 2016. This issue has been discussed with the County Health Department, and testing will be completed in the 2017 calendar year. Historically, radiological contaminate levels have fallen within acceptable parameters for the water district.

## **Important Information Regarding Lead:**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Hamlet of South New Berlin 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 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## **Do I Need to Take Special Precautions?**

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

## **Information for non-English speaking residents:**

### **Spanish**

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

### **French**

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien

## **Why Save Water and How to Avoid Wasting It?**

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

## **Closing**

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.