

Annual Drinking Water Quality Report-2017  
Briarwood Mobile Home Park  
Trussum Pond Rd., Laurel, DE 19956  
Public Water Supply AD# DE0000438  
June 15, 2018

## **INTRODUCTION**

To comply with State and Federal regulations, Briarwood Mobile home Park will be annually issuing a report describing the quality of your drinking water. This report provides an overview of the 2017 water quality. Included are the details about where your water comes from, what it contains, and how it compares to State Standards. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. If you have any questions about this report or concerning your drinking water, please contact Billy Betts at 302-629-4959. We want you to be informed about your drinking water, and we will be available to discuss any drinking water issues in person.

## **WHERE DOES OUR WATER COME FROM?**

1. In general, the source of drinking water (both tap water and bottled water) included 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.
2. Contaminants that may not 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 discharge, oil and gas production, mining and farming.
  - Pesticides and herbicides, which may come from a variety of sources, such as agriculture, urban storm runoff and residential uses.
  - Organic chemicals and contaminants, including synthetic and volatile organic chemicals, which are by products of industrial processes and petroleum production, and can also come from gas stations, urban storm runoff and septic systems.
  - Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
3. 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 the public water system. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for the public health.

## **FACT AND FIGURES**

Our water system serves 242 people through 97 service connections. Our water source is two groundwater wells.

## **SOURCE WATER ASSESSMENT**

The Delaware Department of Natural Resources and Environmental Control (DNREC) Division of Water Resources has completed the Source Water Assessment for the public water supply wells for the Briarwood Manor as required under the 1996 amendments to the Safe Drinking Water Act. This assessment has been performed using the methods specified in the State of Delaware Source Water Assessment Plan (SWAP) (DNREC, 1999)

There are two ground water supply wells used by Briarwood Manor for their drinking water supply. The two wells are located in the Columbia Formation and screened in the unconfined Beaver Dam aquifer. The two unconfined wells are screened at depths up to 92 feet below the ground surface (fbgs). Because these wells primarily draw water from depths less than 100 fbgs, they are considered shallow and therefore have high vulnerability.

Because the pumping capacity of each unconfined well used by Briarwood Manor is greater than 35 gallons per minute (GPM) the wellhead protection areas (WHPAs) for the two wells will consist of a 5 year capture zone delineation generated using a computerized ground- water flow model.

There is one discrete potential source of contamination located with the WHPA's around these two wells. The principal land uses found within the WHPAs for Briarwood Manor is croplands and residential.

Data from the Department of Health and Social Services' Division of Public Health's Office of Drinking Water's (DPH-ODW) analytical database was reviewed for raw/untreated water quality data for the past five years. If any naturally occurring compound was detected above 50% of the drinking water standard or any synthetic compound was detected, then all the data for that compound was recorded. The wells at Briarwood have had a history of Primary Maximum Contaminant Level (PMCL) violations for nitrate from DPH-ODW dating back to 1996, however the system came back into compliance with respect to nitrate in early 2002 upon installation of a nitrate removal system.

A system-wide susceptibility is based on the most conservative rating from the wells that summarizes the most susceptible portions in the system. Overall, the drinking water supply system exceeds drinking standards in the untreated water for metals and nutrients; has a high susceptibility to other inorganic substances and pesticides; a moderate susceptibility to pathogens and petroleum hydrocarbons; and a low susceptibility to other organic substances and PCBs.

The report is available in the Park Management Office at 25713 S. Parkway Rd., Seaford, DE 19973. Monday through Friday 8:00am- 4:00pm. The phone number is 302-629-4959. You may also review this at <http://delawaresourcewater.org/assessments/>.

#### **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, volatile organic compounds and synthetic organic compounds. The table depicts which compound were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentration 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, 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 at (800) 425-4791.

\*Lead: if present, elevated levels of lead can cause serious health problems, especially for pregnant woman and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Donovan Smith MHP is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for a couple of hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking and 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

#### **DEFINITIONS:**

**Maximum contaminant level (MCL):** The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible.

**Maximum contaminants level Goal (MCGL):** The level of contaminant that is allowed in drinking water below which there is no know or expected risk to health. MCLG's allow for a margin of safety.

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

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

**Micrograms per liter (ug/l) or Parts Per Billion (ppb):** Corresponds to one part of liquid in one billion part of liquid (parts per billion-ppb). Or one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000.00.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in the 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

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

#### **MONITORING OR REPORTING VIOLATIONS:**

We routinely test for various contaminants in the water supply to comply with the regulatory requirements, and our reports are submitted to the Delaware Health and Social Services- Division of Public Health as required.

#### **IS OUR WATER SAFE FOR EVERYONE? DO I NEED TO TAKE PRECAUTION?**

It should be noted that some people may be more vulnerable to contaminants in drink water than the general population. Immune-compromised person such as person with cancer undergoing chemotherapy, person who have undergone organ transplants, people with HIV/AIDS or other immune disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about the 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). Please note that testing of the water at this system has shown that this water is suitable for drinking purposes, and contains very low amounts of contaminants and should not pose any health risk.

#### **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 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;
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid sever water 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. Conservations tips include:

- Automatic dishwasher 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 tap water when brushing teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15-20 gallons a day. Fix it and you can save almost 6,000 gallons a year.
- Check your toilets for leaks by putting a few drops of food coloring in your 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 save more than 30,000 gallons a year.

#### **CLOSING**

Thank you for allowing us to continue provide your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvement that will benefit all our customers. We ask that all our customers help us protect our water source, which are the heart of our community, our way of life and our children's future. Please call our office if you have any questions.

## TEST RESULTS

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids ( HAAS) *	11/18/2015	2.8	2.8-2.8		60	ppb	N	By-Product of drinking water disinfection
Total Trihalomethanes (TTHM)	11/18/2015	2.08	2.08-2.08		80	ppb	N	By-Product of drinking water disinfection
Inorganic Contaminants								
Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violations	Likely Source of Contamination	
Chromium	5/5/2015	1.9	1.9-1.9	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits	
Fluoride	2017	1	1.03-1.03	2	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Unregulated inorganic Contaminants								
Alkalinity	2/8/2017	399	399-399	N/A	ppm	N	Naturally Occurring	
Chloride	2/8/2017	27.9	27.9-27.9	250	ppm	N	Naturally Occurring	
pH	2/8/2017	5.4	5.4-5.4	6.5-8.5	ph	N	Naturally Occurring	
Sodium	2/8/2017	192.2	192.2-192.2	N/A	ppm	N	Naturally Occurring	
Hardness	09/04/014	8	8.0-8.0	N/A	mg/l	N	Naturally Occurring	
Sulfate	2/8/2017	7.7	7.7-7.7	250	ppm	N	Naturally Occurring	
Nickel	5/5/2015	0.0006	.0006-.0006	100	ppm	N	Naturally Occurring	
Manganese	5/5/2015	0.015	.015-.015	N/A	ppm	N	Naturally Occurring	
Radioactive Contaminants								
Combined Radium 226/228	7/13/2016	1.33	1.33-1.33	0	5	pCi/L	N	Erosion of natural deposits
Gross alpha excluding radon and uranium	7/13/2016	1.21	1.21-1.21	0	15	pCi/L	N	Erosion of natural deposits
Lead and Copper	Date Sampled	MCLG 90th percentiled	Action Level (AL)	90th Percentile	#sites over all	Units	Violation	Likely Source of Contamination
Copper	8/21/2015	1.3	1.3	0.0028	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives Corrosion of household plumbing systems