

## 2016 WATER QUALITY REPORT (January 1 to December 31, 2015)

Dear Customer,

Sussex Shores Water Co., Inc. (SSWC) is proud of the fine drinking water it provides. This eighteenth annual Water Quality Report shows the sources of our water, lists the results of our tests, and contains a great deal of important information about water and health. This publication conforms to the federal regulation requiring water utilities to provide this information annually. We support the passage of this regulation and believe the information provides a valuable service to our customers. The information in this report is also submitted formally to the Delaware Health and Social Services, Division of Public Health, Office of Drinking Water (ODW). This agency monitors our compliance with the many regulatory standards and tests our water regularly to assure high quality water. SSWC will notify you immediately if there is ever any reason for concern about our water. We are happy to show you how we have surpassed water quality standards. If you have any questions about this report or our water, please call us at (302) 539-8044.

### \*\*\*\*\*IMPORTANT REMINDER—FIRE SAFETY\*\*\*\*\*

**In the unfortunate event of a fire, the firemen must be able to locate and operate the hydrants in a timely manner. Minutes or even seconds lost trying to locate a fire hydrant or clearing obstructions to the fire hydrant could result in additional property damage, injuries or fatalities.**

**DELAWARE STATE FIRE REGULATION, Part III, 3-2.3.1 states the following: An eight foot clear path to all fire hydrants, and a four foot clear radius around all fire hydrants must be maintained at all times.**

**ANY OBSTRUCTIONS SUCH AS BUSHES, FENCES, TRASH BINS, etc., must be relocated in order to be in compliance with the regulation, and avoid fines from the Delaware State Fire Marshal's Office – (302) 856-5600.**

### The Source of Your Water

Sussex Shores Water Co. is presently supplied by ground water pumped from four 185' deep wells, which tap the Pocomoke aquifer, and four wells in the Columbia formation. Our ground water wells use the natural filtering capability of the aquifer to remove harmful bacteria and other naturally occurring substances from the water. Our water treatment facilities use the best available technology to ensure the highest quality water. The majority of our wells are located in confined aquifers, which ensure high quality water protected from surface-borne contaminants, past farming influences, and saltwater intrusion.

*SSWC works hard to provide you and your family with high quality water and reliable service 24 hours a day, 365 days a year.*

The Division of Public Health, in conjunction with The Delaware Department of Natural Resources and Environmental Control (DNREC) has conducted source water assessments for all community water systems in Delaware. DNREC states there is a high susceptibility to nutrients, pathogens, petroleum hydrocarbons, pesticides, PCBs, organic and inorganic compounds, and metals. Contact SSWC at (302) 539-8044 regarding how to get a copy of this assessment. You may also review it on the website: <http://delawaresourcewater.org/assessments/>

### Bottled Water or Tap Water?

To ensure that tap water is safe to drink, EPA prescribes limits on 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.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants do not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

\*Health Notes- Some people may be more vulnerable to contaminants in drinking water than is the general population. Immune-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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

\*Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

\* 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. We cannot control the variety of material 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>.

## An Explanation of the Water-Quality Data Table

The table shows the results of our water-quality analyses. Every substance that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

Definitions of MCL and MCLG are important.

**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 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.

**Detected Level:** The highest level detected of a contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement, or an average of values depending on the contaminant.

**Range:** The lowest to the highest values for all samples tested for each parameter. If only one sample is tested, or no range is required for this report, then no range is listed for that contaminant in the table.

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

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

**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.

Key To Table		ppm = parts per million, or milligrams per liter (mg/l)	<i>*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 representative, may be more than one year old.</i>
MCL = Maximum Contaminant Level		ppb = parts per billion, or micrograms per liter (µg/l)	
SMCL = Secondary Maximum Contaminant Level		pCi/L = picocuries per liter	
MCLG = Maximum Contaminant Level Goal		n/a = not applicable      nd = none detected	

Unregulated Inorganic Results	Date Tested	Units	MCLG	MCL (SMCL)	Detected Level	Range/Average Level	Major Sources
Alkalinity	12/15	ppm		n/a	32	30 – 32/31	
Calcium	1/08	ppm		n/a	18	12 – 18/15	Erosion of natural deposits
Chloride	12/15	ppm	250	(250)	34.2	19.9 – 34.2/27.05	Runoff; leaching from natural deposits
Hardness	3/10	ppm		n/a	15.7	11.2 - 15.7/13.45	Erosion of natural deposits
Iron	12/15	ppb	300	(300)	200	0-200/100	Corrosion of household plumbing; erosion of natural deposits
Manganese	11/08	ppb	50	(50)	6.1	n/a	Erosion of natural deposits
pH	12/14	ppm		(6.5-8.5)	7	6.2– 7/6.6	
Sodium	12/15	ppm	50	n/a	34.4	23-34.4/28.75	Runoff; leaching from natural deposits
Sulfate	12/15	ppm		(250)	5.1	4.9-5.1/5	Erosion of natural deposits
Total Dissolved Solids	3/10	ppm	500	(500)	134	132 – 134/133	Erosion of natural deposits

Regulated Inorganic Results	Date Tested	Units	MCLG	MCL	Detected Level	Range	Major Sources
Barium	11/08	ppb	0	2000	20.3	n/a	Discharge from drilling waste, refineries; erosion of natural deposits
Copper	2013	ppm	0	AL=1.3	90 <sup>th</sup> Percentile .07	n/a	Corrosion of household plumbing; erosion of natural deposits
Chromium	11/08	ppb	0	100	1.3	n/a	Discharge from steel and pulp mills; erosion of natural deposits
Lead	2013	ppb	0	AL=15	90 <sup>th</sup> Percentile5	n/a	Corrosion of household plumbing; erosion of natural deposits
Nitrate	2015	ppm	0	10	4	3.1-3.9	Erosion of natural deposits; fertilizer runoff; leaching septic/sewer
Fluoride	2015	ppm	4	4	.2	0-0.18	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Volatile Organic Compounds	Date Tested	Units	MCLG	MCL	Detected Level	Range	Major Sources
Total Trihalomethanes	2015	ppb	0	100	4.21	4.03 - 4.21	By-product of drinking water chlorination
Total Haloacetic Acids	2015	ppb	0	60	1.53	1.53 - 1.53	By-product of drinking water chlorination
Chlorine	2015	ppm	4	4	1.2	1.0 - 1.2	Water additive used to control microbes
<b>***One ppm corresponds to one ounce in 7, 350 gallons of water. One ppb corresponds to one ounce in 7, 350, 000 gallons of water***</b>							

## Your Drinking Water Surpasses All State and Federal Standards for Drinking Water

The data presented in this report represents the most recent testing performed by the Delaware Health and Social Services, Division of Public Health, Office of Drinking Water (ODW) and SSWC in accordance with regulations. SSWC's water was also tested by ODW for scores of other contaminants, none of which were detected. This Water Quality Report was prepared by Bradley F. Dorey, Director of Operations, SSWC (Public Water System ID #0000557). This report will not be mailed to customers; however, additional copies are available upon request. Report may also be viewed on our website: [www.sussexshoreswater.com](http://www.sussexshoreswater.com).

Sussex Shores Water Co. is proud to be a member of the following organizations, dedicated to Safe Drinking Water: ***American Water Works Association, Delaware Rural Water Association, National Association of Water Companies, and the National Rural Water Association.***