Annual Drinking Water Quality Report For Colonial Water Company-Springdale System 2020 Dover, Massachusetts

MASSDEP PWSID # 3078008

This Consumer Confidence Report is a snapshot of the quality of drinking water we provided to you in 2020. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with information because informed customers are our best customers.

PUBLIC WATER SYSTEM INFORMATION

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Colonial Water Company (CWC) – Springdale Division (SD) is proud to provide you with our water quality report for 2020. The Company is committed to delivering our customers high quality drinking water that meets or surpasses State and Federal standards for quality and safety. This report includes the State and Federally mandated format for language and information.

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine operations of our system.

Water System Improvements

During the course of 2020, The Company replaced two variable frequency drive pumps at the treatment plant to increase the reliability of service. In addition, it performed a periodic inspection of the clear well which indicated it was in good condition. Finally, significant upgrades were made to the station SCADA system.

2. YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Your water is provided by the following sources listed below:

Source Name	MassDEP Source ID#	Source Type	Location of Source
Well #1	3078008-01G	Groundwater	End of Old Colony Drive
Well #2	3078008-02G	Groundwater	End of Old Colony Drive

Your water is supplied by groundwater pumped from two, gravel packed wells located on Old Colony Drive. The water quality of our system is constantly monitored by us and MassDEP to determine the effectiveness of existing water treatment and to ensure high quality.

How Are These Sources Protected?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving this water system. The SWAP Report assesses the susceptibility of public water supplies.

Where Can I See The SWAP Report?

The MassDEP has prepared an assessment for the Colonial Water Company – Springdale Division water sources as required by the Safe Drinking Water Act. This is a measure of a water supply's potential to become contaminated based on local hazards. The program was initialized in 1999 and completed in 2003. Now, that information is available to the public at the Mass DEP website:<u>https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program</u>.

In general, the Mass DEP found that our system was not highly susceptible to contamination. However, the two biggest threats to our water supply are improperly maintained septic systems and lawn care products.

Residents can help protect sources by:

- Practicing good septic system maintenance
- Supporting water supply protection initiatives at the next town meeting
- Taking hazardous household chemicals to hazardous materials collection days
- Limiting pesticide and fertilizer use, etc.

Protect your drinking water from Cross Connections:

A cross connection occurs whenever a potable drinking water line is connected to a piece of equipment or piping containing non-potable water. An unprotected cross connection could contaminate the water in your home and also affect the water at the street in the event of backpressure or back-siphonage. An outside water tap or garden hose tends to be the most common type of cross connection in the home. The garden hose becomes a hazard when connected to a chemical sprayer used for weed control and fertilizer applications. You can protect against this by installing vacuum breakers on all your outside faucets. Vacuum breakers can be purchased at your local hardware store and are inexpensive and easy to install. Other potential cross connections can occur on lawn irrigation systems, irrigation wells and fire protection systems. **Irrigation wells should never be connected to the household plumbing, as that is a direct cross connection in violation of the plumbing code and drinking water regulations!** For more information on cross connections, please contact the Colonial Water Company – Springdale Division at 508-785-0052, or go to www.colonialwatercompany.com.

3. SUBSTANCES FOUND IN TAP WATER

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 in some cases, 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:

<u>Microbial contaminants</u> -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 stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming. <u>Pesticides and herbicides</u> -which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

<u>Organic chemical contaminants</u> -including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

<u>Radioactive contaminants</u> -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, the Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

All 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 (800-426-4791).

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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Colonial Water Company 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 or at http://www.epa.gov/safewater/lead.

4. IMPORTANT DEFINITIONS

The following table lists drinking water contaminants that we detected during the 2019 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table is from testing done between January 1st and December 31, 2019. The state requires us to monitor certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year.

<u>Maximum Contaminant Level (MCL)</u> – 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.

<u>Maximum Contaminant Level Goal (MCLG)</u> –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 (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u> -- The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) 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 contaminants.

<u>Treatment Technique (TT)</u> – A required process intended to reduce the level of a contaminant in drinking water.

<u>Action Level (AL)</u> – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

ppm = parts per million, or milligrams per liter (mg/l)

- ppb = parts per billion, or micrograms per liter (ug/l)
- ppt = parts per trillion, or nanograms per liter
- pCi/l = picocuries per liter (a measure of radioactivity)
- NTU = Nephelometric Turbidity Units
- ND = Not Detected

N/A = Not Applicable

mrem/year = millirems per year (a measure of radiation absorbed by the body)

5.

WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table(s) is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table(s).

	Date(s) Collected	90 TH percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Source of Contamination
Lead (ppb)	9/21/20	.008	15	0	5	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	9/21/20	.27	1.3	1.3	5	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination	
Volatile Organic Contaminants								
Benzene (ppb)	9/29/20	ND	ND	5	0	N	Discharge from factories; leaching from gas storage tanks and landfills	
Carbon tetrachloride (ppb)	9/29/20	ND	ND	5	0	N	Discharge from chemical plants and other industrial activities	

Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Chlorobenzene (ppb)	9/29/20	ND	ND	100	100	N	Discharge from and agricultural chemical factories
o-Dichlorobenzene (ppb)	9/29/20	ND	ND	600	600	N	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	9/29/20	ND	ND	7	7	N	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	9/29/20	ND	ND	70	70	N	Breakdown product of trichloroethylene and tetrachloroethylene
trans-1,2- Dichloroethylene (ppb)	9/29/20	ND	ND	100	100	N	Discharge from industrial chemical factories
Dichloromethane (ppb)	9/29/20	ND	ND	5	0	N	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	9/29/20	ND	ND	5	0	N	Discharge from industrial chemical factories
Ethylbenzene (ppb)	9/29/20	ND	ND	700	700	N	Leaks and spills from gasoline and petroleum storage tanks
Styrene (ppb)	9/29/20	ND	ND	100	100	N	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (PCE) (ppb)	9/29/20	ND	ND	5	0	N	Discharge from factories and dry cleaners; residual of vinyl-lined water mains
1,2,4-Triclorobenzene (ppb)	9/29/20	ND	ND	70	70	N	Discharge from textile- finishing factories
Trichloroethylene (TCE) (ppb)	9/29/20	ND	ND	5	0	N	Discharge from metal degreasing sites and other factories
Toluene (ppm)	9/29/20	ND	ND	1	1	N	Leaks and spills from gasoline and petroleum storage tanks; discharge from petroleum factories
Vinyl Chloride (ppb)	9/29/20	ND	ND	2	0	N	Leaching from PVC piping; discharge from plastics factories
Xylenes (ppm)	9/29/20	ND	ND	10	10	N	Leaks and spills from gasoline and petroleum storage tanks; discharge from petroleum factories; discharge from chemical factories
Radioactive Contamin	ants						

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Acetone (ppm)	9/29/20	ND	ND		6.3	Discharge from industrial production and use, in automobile exhaust, from landfills and natural sources
Bromobenzene	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing

Unregulated Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Bromomethane (ppb)	9/29/20	ND	ND		10	Run-off from use as a fumigant
Bromodichloromethane	9/29/20	ND	ND		N/A	Trihalomethane; by-product of drinking water chlorination
Bromochloromethane (Halon 1001) (ppb)	9/29/20	ND	ND		90	Used as a fire-extinguishing fluid, an explosive suppressant, and as a solvent in the manufacturing of pesticides
Bromoform	9/29/20	1.2	1.2		N/A	Trihalomethane; by- product of drinking water chlorination
Butylbenzene isomers (n;sec;tert)	9/29/20	ND	ND		N/A	Run-off from industrial use
Chloroform (ppb)	9/29/20	ND	ND	N/A	70	By-product of drinking water chlorination (In non-chlorinated sources it may be naturally occurring)
Chloromethane (methyl chloride) (ppt)	9/29/20	ND	ND		2,690 to 269,000	Discharge from industrial uses
o-Chlorotoluene	9/29/20	ND	ND		N/A	Discharge from industrial use
m-Dichlorobenzene	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing
1,1-Dichloroethane ¹ (ppb)	9/29/20	ND	ND		70	Discharge from use as a degreasing agent
2,2-Dichloropropane	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing
1,3-Dichloropropane	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing
1,1-Dichloropropene	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing
1,3-Dichloropropene (cis,trans) (ppt)	9/29/20	ND	ND		400	Run-off from use as a nematocide
Hexachlorobutadiene	9/29/20	ND	ND		N/A	Discharge from use as an industrial solvent
Isopropylbenzene	9/29/20	ND	ND		N/A	Discharge from chemical manufacturing
Isopropyltoluene	9/29/20	ND	ND		N/A	Discharge from chemical manufacturing
Methyl ethyl ketone (ppb)	9/29/20	ND	ND		350	Discharge from use as a production solvent and degreaser
Methyl isobutyl ketone (ppm)	9/29/20	ND	ND		4	Discharge from use as a production and extraction solvent
Naphthalene (ppb)	9/29/20	ND	ND		140	Discharge from use in mothballs and other domestic products
1,1,1,2-Tetrachloroethane	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing
1,1,2,2-Tetrachloroethane	9/29/20	ND	ND		N/A	Discharge from use in dry cleaning
Tetrahydrofuran (ppm)	9/29/20	ND	ND		1.3	Discharge from use as an adhesive for joining pipes in water treatment systems and as a production solvent
1,2,3-Trichlorobenzene	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing
1,2,3-Trichloropropane (ppq)	9/29/20	ND	ND		400 to 40,000	Discharge from use in paint and varnish removers
1,2,4-Trimethylbenzene	9/29/20	ND	ND		N/A	Discharge from use in dyes and paints
1,3,5-Trimethylbenzene	9/29/20	ND	ND		N/A	Discharge from use in chemical manufacturing

Secondary Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Aluminum (ppb)	4/19/19	ND	ND		200	Residue from water treatment process: erosion of natural deposits

Unregulated Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source				
Chloride (ppm)	4/19/19	103	103		250	Runoff and leaching from natural deposits; seawater influence				
Color (C.U.)	4/19/19	ND	ND	15	N/A	Naturally occurring organic material				
Copper (ppm)	4/19/19	.02	.02	1	N/A	Naturally occurring organic material				
Iron (ppb)	4/19/19	.09	.09	300	N/A	Naturally occurring, corrosion of cast iron pipes				
Manganese* (ppb)	4/19/19	ND	ND	50	Health Advisory of 300	Natural sources as well as discharges from industrial uses				
	* EPA has established a lifetime Health Advisory (HA) for manganese of 0.3 mg/L and an acute HA at 1.0 mg/L (Add health language listed below if detect is over 300 ppb)									
Odor (T.O.N.)	4/19/19	ND	ND	3	N/A	Erosion of natural deposits; Leaching from wood preservatives0				
рН	4/19/19	7.7	7.7	6.5-8.5	N/A	Runoff and leaching from natural deposits; seawater influence				
Silver (ppb)	4/19/19	ND	ND	100	N/A	Erosion of natural deposits				
Sulfate (ppm)	4/19/19	12.4	12.4	250	N/A	Runoff and leaching from natural deposits; industrial wastes				
Total Dissolved Solids (TDS) (ppm)	4/19/19	310	310	500	N/A	Erosion of natural deposits.				
Zinc (ppm)	4/19/19	0.010	0.010	5	N/A	Erosion of natural deposits, leaching from plumbing materials				

6. COMPLIANCE WITH DRINKING WATER REGS

Does My Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all applicable health standards regulated by the state and federal government. If you have any further questions about your water, please do not hesitate to call us at (508) 785-0052, or e-mail us at customerservice@colonialwatercompany.com.