

Consumer Confidence Report

Badger Hill

EPA # 1562030

2022

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

NOW IT COMES WITH A LIST OF INGREDIENTS.



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, 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:

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 discharges, oil and gas production, mining or farming.

Organic chemical contaminants, including per- and polyfluoroalkyl substances, synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and

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, the EPA prescribes regulations which limit the amounts of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

What is the source of my drinking water? Four bedrock wells supply the Badger Hill water system. Well 1 is located 199 feet northwest of the pump house, is 505 feet deep and yields 40 gallons per minute (gpm). Well 3 is located 590 feet southwest of the pump house, 305 feet deep and yields 40 gpm. Well 4 is located 1300 feet west of the pump house, is 400 feet deep and yields 26.7 gpm. and Well 5 is located 1300 feet west of the pump house, is 840 feet deep and yields 17 gpm. **Bulk water was delivered in May for flushing the system.**

BULK WATER DELIVERIES			
Bulk Water Source	Dates of delivery	Gallons delivered	Reason for delivery
Pennichuck Water	5/3/2021	24,000	Flushing system
Pennichuck Water	5/4/2021	24000	Flushing system

Water treatment consists of sodium hypochlorite for disinfection and as a pre-oxidant, MTM media to reduce iron and manganese, filtration to reduce radium, and aeration to reduce radon levels.

Why are contaminants in my water? 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Do I need to take special precautions? 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 at 1-800-426-4791

Source Water Assessment Summary

Department of Environmental Service (DES) prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options.

Source Name	Date	Low	Med	High
Bedrock Well # 1	1/09/03	9	2	1
Bedrock Well # 3	1/09/03	9	2	1
Bedrock Well # 4	No Source Assessment			
Bedrock Well # 5	No Source Assessment			

Note: This information is over 15 years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

The complete Assessment Report is available for review. For more information, call *Matt Day* at 800-553-5191 or visit the NHDES website.

How can I get involved?

For more information about your drinking water, please call our laboratory at 800-553-5191 or send an email to customer-service@pennichuck.com. Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions you may have.

Drinking Water Contaminants:

Radon: Radon is a radioactive gas that you cannot see, taste or smell. It can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer.

Lead: 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. This water system is responsible for high quality drinking water but cannot control the variety of materials used in your plumbing components. **When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds to 2 minutes before using water for drinking or cooking.** Do not use hot 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 at 800-426-4791 or at <http://water.epa.gov/drink/info/lead>.

Definitions

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

Ambient Groundwater Quality Standard or

AGQS: The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

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.

Maximum Residual Disinfectant Level or 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 or

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 contaminants.

Abbreviations

NA: Not Applicable

ND: Not Detectable at testing limits

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

ppt: parts per trillion

RAA: Running Annual Average

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

2021 Data

	Date Collected	90th Percentile	Action Level	MCLG	# of Sites Sampled	# Sites Above Action Level	Violation	
Lead (ppb)	2020	ND	15	0	10	0	No	Corrosion of household plumbing systems, erosion of natural deposits
Copper (ppm)	2020	0.167	1.3	1.3	10	0	No	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives

Inorganic Contaminants	Year Collected	Highest Detect	Range Detected	MCL	MCLG	Violation Yes/No	Typical Source of Contaminant
Barium (ppm)	2019	0.099	NA	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion or the natural deposits
Organic Chemical Contaminants							
Perfluorooctanoic acid (PFOA)(ppt)	2021	3.61	2.13 – 3.61	12	0	No	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
Disinfectants and Disinfection By-Products							
Chlorine (ppm)	Monthly 2021	Average 0.85	0.07 – 1.20	4-MRDL	4-MRDLG	No	Water additive used to control microbes
Total Trihalomethanes (TTHM) (ppb)	2020	22	NA	80	0	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	2020	7.0	NA	60	0	No	By-product of drinking water disinfection
Radiological Contaminants							
Compliance Gross Alpha (pCi/L)	2017	5.0±1.5	ND - 5	15	0	No	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L)	2017	2.0±0.5	NA	5	0	No	Erosion of natural deposits
Uranium (ppb)	2017	6.8	2.9 – 6.8	30	0	No	Erosion of natural deposits

SECONDARY CONTAMINANTS					
Secondary MCLs (SMCL)	Level Detected	Date	Treatment technique (if any)	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Chloride (ppm)	26	2019	N/A	250	Wastewater, road salt, water softeners, corrosion
Fluoride (ppm)	0.20	2019	N/A	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Hardness (ppm)	119	2019	N/A	N/A	Geological
Iron (ppm)	ND	2019	MTM	0.3	Geological
Manganese (ppb)	ND	2019	MTM	50	Geological
PH (ppm)	7.53	2019	N/A	6.5-8.5	Precipitation and geology
Sodium (ppm)	11.6	2019	N/A	100-250	Road salt, septic systems (salt from water softeners) We are required to regularly sample for sodium
Sulfate (ppm)	27	2019	N/A	250	Naturally occurring
Zinc (ppm)	0.0042	2019	N/A	5	Galvanized pipes

Secondary Maximum Contaminant Level or SMCL: They identify acceptable concentrations of contaminants which cause unpleasant tastes, odors, or colors in the water.

ADDITIONAL TESTING					
Additional Tests	Results	Date	Treatment technique (if any)	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Radon (pCi/L)	139 - 1188	2021	aeration	Advisory Level 2000 (pCi/L)	Radon is a radioactive gas that you can't see, taste or smell. It can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer.