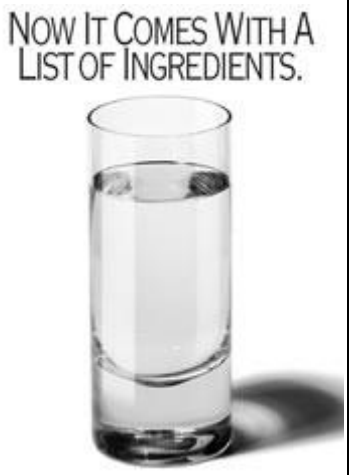
Consumer Confidence Report

Town of Seabrook Water System

2011

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).



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.

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

Organic chemical 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 water runoff, and septic systems.

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. 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?

The Seabrook water system is supplied by groundwater from five gravel-packed wells and five rock wells located in the western part of town. These wells supplied approximately 358 million gallons of water to the Town in 2010. The gravel-packed wells range from 50 to 125 feet deep. The rock wells are 500 feet deep.

All wells are chlorinated with sodium hypochlorite or calcium hypochlorite. Some wells with high iron and manganese are treated with polyphosphate to reduce plumbing fixture staining. Fluoride is not added to the water supply.

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

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. The results of the assessment for Seabrook, prepared on June 13, 2000 are noted below. The assessment for GPW #7 was prepared on June 10, 2005.

Source Assessment Information			
Source Name	Susceptibility Factors		
	Low	Med	High
GPW #1	4	5	3
GPW #2	5	4	3
GPW #3	3	6	3
GPW #4	4	5	3
GPW #7	6	4	2
RW #1	4	4	4
RW #2	4	4	4
RW #3	5	4	3
RW #4	5	5	2
RW #5	5	5	2

GPW – Gravel-packed wells
RW – Rock wells

The complete Assessment Report is available for review at the Water Department office. For more information, call Water Superintendent, Curtis Slayton, at (603) 474-9921 or visit the DES Drinking Water Source Assessment website at http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm.

How can I get involved?

We encourage public interest and participation in our community's decisions affecting drinking water. The Water Superintendent is available during normal business hours at the Seabrook Water Department Office, 43 Railroad Avenue or by calling (603) 474-9921. Also, the Town Manager and Selectmen can be contacted at (603) 474-3311, if additional information is required. The Board of Selectmen/ Water Commissioners meets every other Wednesday.

Violations and Other information: Arsenic levels above 10 ppb: Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Elevated levels are present in our rock wells. As this water is blended with water from our gravel-packed wells, the arsenic level is reduced. See the following arsenic violation list.

Date Sample Taken	Location of Sample	Sample Results
Feb 11, 2010	Bedrock Well 3	12 ppb
Feb 11, 2010	Bedrock Well 5	22 ppb
Apr 8, 2010	Bedrock Well 3	12 ppb
Apr 8, 2010	Bedrock Well 5	20 ppb
Aug 12, 2010	Bedrock Well 1	12 ppb
Aug 12, 2010	Bedrock Well 3	11 ppb
Aug 12, 2010	Bedrock Well 5	20 ppb
Oct 12, 2010	Bedrock Well 3	13 ppb
Oct 12, 2010	Bedrock Well 5	18 ppb

New Water Treatment Facility – 2011

The new treatment facility on Route 107 which is under construction will be placed into service on January 27, 2011. The treatment facility is designed with state of the art technology to remove arsenic, iron, manganese and radon from our rock well sources. Two new rocks which were constructed under the project will also be treated through the treatment plant. The treatment facility will help ensure that Seabrook will be able to meet the water quality standards set by the Environmental Protection Agency. The Town received $5 million in federal stimulus funds to help pay for the project.

Definitions of Table Terms and Abbreviations

The definitions below are terms used in the Detected Water Quality Results Table**.**

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

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

ND: Not Detectable at testing limits

NA: Not Applicable

pCi/L: picocuries per liter

ppb: parts per billion

ppm: parts per million

RAA: Running Annual Average

TTHM: Total Trihalomethanes

Sampling Results: The results for detected contaminants listed in the table are from the most recent monitoring done in compliance with regulations ending with calendar year 2010. The DES allows water systems to monitor for some contaminants less than once per year because concentrations of the contaminants do not change frequently. Thus some data present, though representative, may be more than one year old.

Note 1- Total Coliform Bacteria: On August 5, 2010 total coliform bacteria was detected in one compliance sample collected in the system. Three (3) additional samples were subsequently collected on August 9, 2010 as part of resampling required by the DES. Total coliforms were not detected in any of the additional samples.

Drinking Water Contaminants:

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 can not 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 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 or at http://water.epa.gov/drink/info/lead/index.cfm

Radon: 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.

DETECTED WATER QUALITY RESULTS

Inorganic Contaminants	Units	MCL	MCLG	Max Level Detected	Range	Violation Yes/No	Likely Source of Contaminant
Arsenic	ppb	10	0	22	5 - 22	Yes	Erosion of natural deposits
Barium	ppm	2	2	0.022 8/18/09	ND - 0.022	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (as Nitrogen)	ppm	10	10	0.89	ND - 0.89	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Inorganic Contaminants	Units	MCL	MCLG	90th Percentile	# of Sites Above AL	Violation Yes/No	Likely Source of Contaminant
Copper	ppm	AL=1.3	1.3	0.249 8/6/2008	0 out of 30 sites	No	Corrosion of household plumbing systems

Radioactive Contaminants	Units	MCL	MCLG	Average Amount	Range	Violation Yes/No	Likely Source of Contaminant
Compliance Gross Alpha	pCi/L	15	0	1.6	1.6 *	No	Erosion of natural deposits
Radon	pCi/L	Unregulated		1340	1340 *	NA	Erosion of natural deposits
Uranium	ppb	30	NA	1.5	1.5 *	No	Erosion of natural deposits
Combined Radium (226+228)	pCi/L	5	0	2.7	2.7	No	Erosion of natural deposits

* only one sample taken (7/24/08)

Volatile Organic Contaminants	Units	MCL	MCLG	Max Level Detected	Range	Violation Yes/No	Likely Source of Contaminant
Trichloroethene	ppb	5	0	1.3	ND - 1.3	No	Discharge from metal degreasing sites and other factories
CIS-1,2-Dichloroethylene	ppb	70	70	0.5	ND - 0.5	No	Discharge from industrial chemical factories
Haloacetic Acids (HAA5s)	ppb	60	NA	2.2	ND - 2.2	No	By-product of chlorination
Total Trihalomethanes (TTHMs)	ppb	80	NA	12	8.9 - 12	No	By-product of chlorination

Volatile Organic Contaminants	Units	MRDL	MRDLG	Yearly Running Ave.	Range	Violation Yes/No	Likely Source of Contaminant
Chlorine	ppm	4	4	0.20	0.03 - 0.35	No	Water additive used to control microbes

Microbiological Contaminants		MCL	MCLG	Max Level Detected	Range	Violation Yes/No	Likely Source of Contaminant
Total Coliform Bacteria		> 1	0	1(See Note 1)	0 - 1	No	Naturally present in the environment

Secondary Unregulated Contaminants of Interest	Units	MCL	MCLG	Max Level Detected	Range Average	Violation Yes/No	Likely Source of Contaminant
Sodium	ppm	NA	NA	33 8/18/2009	5 - 33 Average 20	No	Runoff/leaching from natural deposits
Hardness as $CaCO_3$	ppm	NA	NA	235 8/18/2009	49 - 235 Average 133	No	Runoff/leaching from natural deposits