

# 2021 Consumer Confidence Report

Pembroke water Works  
1861010

## Introduction

Like any responsible public water system, our mission is to provide the best quality water at the lowest cost. Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future.

In the past year, we have completed 2100' of water main replacement to improve water quality. In the coming year we intend to replace 1360' of water main.

These investments along with on-going operation and maintenance costs are supported by user fees. When considering the high value we place on water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

## 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 stormwater runoff, and residential uses.

**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.

**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 prescribe 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?** Pembroke Water Works derives its water from 5 gravel packed wells. The wells are located in Pembroke and Allenstown and are pumped into two storage tanks, one in Pembroke and one in Hooksett on the Al-

lenstown Town line. The 3 wells in Pembroke are near the Soucook River and the wells in Allenstown are near the Suncook River.

## Why are contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contam-

inants. 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

NHDES 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, prepared on 9/26/2007 are noted below.

(Bear Brook Well #7), received (2) high susceptibility ratings, (1) medium susceptibility ratings, and (9) low susceptibility ratings.

(Concord Well #2) received (3) high susceptibility ratings, (2) medium susceptibility ratings, and (7) low susceptibility ratings.

Note: This information is over 14 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.

NOW IT COMES WITH A LIST OF INGREDIENTS.



The complete Assessment Report is available for review at the Pembroke Water Works Office located at 346 Pembroke Street. For more information, call *Matthew Gagne* at 603-485-3362 or visit the [NHDES website](#).

**How can I get involved?** Meetings of the Pembroke Water Works' Board of Commissioners are held on the third Thursday of each month beginning at 6:00 p.m. and are open to the public. The meetings are held at the Pembroke Water Works office at 346 Pembroke Street, Pembroke. If you have any questions or need more information, please contact Matthew Gagne at (603) 485-3362, fax (603) 485-1956, or e-mail [pembrokewaterworks@comcast.net](mailto:pembrokewaterworks@comcast.net) and or by mail at Pembroke Water Works, 346 Pembroke Street, Pembroke, NH 03275-0234. The Pembroke Water Works Staff can be reached Monday through Friday 9:00 a.m. to 3:00 p.m. Please visit the following website for the Town Of Pembroke Water Works <https://www.pembroke-nh.com/>.

**Violations and Other information:** The Pembroke Water Works had no violations in 2021. See violation list in table below.

#### Definitions:

**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.

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

**Level I Assessment:** A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

**Level II Assessment:** A very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**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.

**Treatment Technique** or **TT:** A required process intended to reduce the level of a contaminant in drinking water.

#### Abbreviations

BDL: Below Detection Limit

mg/L: milligrams per Liter

NA: Not Applicable

ND: Not Detectable at testing limits

NTU: Nephelometric Turbidity Unit

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

RAA: Running Annual Average

TTHM: Total Trihalomethanes

UCMR: Unregulated Contaminant Monitoring Rule

ug/L: micrograms per Liter

#### 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>

System Name: Pembroke Water Works PWS ID: 1861010

## 2022 Report (reporting 2021 data)

VIOLATIONS					
VIOLATIONS	Date of violation	Explain violation	Length of violation	Action taken to resolve	Health Effects (Env-Dw 804-810)
Public notice	N/A	N/A	N/A	N/A	N/A
Monitoring and Reporting (M/R)	N/A	N/A	N/A	N/A	N/A
MCL	N/A	N/A	N/A	N/A	<i>Insert health effects language for contaminant from Env-Dw 804-810</i>
<u>E.coli</u> MCL	N/A	N/A	N/A	N/A	<u>E.coli</u> are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for E. coli, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found.
TT (Treatment Technique)	N/A	N/A	N/A	N/A	Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
Filtration/disinfection Processes	N/A	N/A	N/A	N/A	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

## ASSESSMENTS

During the past year we were required to conduct Assessment(s)	Number of assessments required in the reporting year	Number of assessments completed in the reporting year	Number of corrective actions required	Number of corrective actions completed  <i>If you completed all corrective actions you can remove the italicized statements in this table.</i>	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
Level I	0	0	0	N/A	<i>During the past year we failed to correct all identified defects that were found during the assessment.</i>
Level II	0	0	0	N/A	<i>During the past year we failed to correct all identified defects that were found during the assessment.</i>
Level II  We were required to complete a Level II assessment because we found <i>E. coli</i> in our water system.	0	0	0	N/A	<i>E.coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found <i>E.coli</i> bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.  <i>We have failed to correct all sanitary defects that were identified during the assessment that was conducted.</i>

## ASSESSMENTS NOT COMPLETED

During the past year we were required to conduct Assessment(s)	Number of assessments required in the reporting year	Number of assessments completed in the reporting year	Number of corrective actions required	Number of corrective actions completed	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.
Level I	0	0	0	N/A	During the past year we failed to conduct all of the required assessment(s).
Level II	0	0	0	N/A	During the past year we failed to conduct all of the required assessment(s).
Level II  Required because <i>E. coli</i> was found in our water system.	0	0	0	N/A	<i>E.coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found <i>E.coli</i> bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct and problems that were found during these assessments.

## LEAD AND COPPER

Contaminant (Units)	Action Level	90 <sup>th</sup> percentile sample value *	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	.364	8/3-8/6 2021	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Lead (ppb)	15	.335		0	No	Corrosion of household plumbing systems, erosion of natural deposits	(15 ppb in more than 5%) Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791). (above 15 ppb) Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

## DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected*	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
<b>Microbiological Contaminants</b>						
<i>E. coli</i> Bacteria	0	0	0	No	Human and animal fecal waste	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.
Total Organic Carbon (ppm)	N/A	TT	N/A	No	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Turbidity (NTU)	N/A	TT	N/A	No	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
<b>Radioactive Contaminants</b>						
Compliance Gross Alpha (pCi/L)	.2-.6 (2015-2018)	15	0	No	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium (ug/L)	ND	30	0	No	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
Combined Radium 226 + 228 (pCi/L)	.1-.6 (2015)	5	0	No	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Inorganic Contaminants</b>						
Antimony (ppb)	ND	6	6	No	Discharge from petroleum; fire retardants; ceramics; electronics; solder	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar
Arsenic (ppb)	ND	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	(5 ppb through 10 ppb) While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

						(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.
Asbestos (MFL)	ND	7	7	No	Decay of asbestos cement water mains; erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Barium (ppm)	.0016-.026 (2019-2021)	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Beryllium (ppb)	ND	4	4	No	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
Bromate (ppb)	ND	10	0	No	By-product of drinking water disinfection	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
Cadmium (ppb)	ND	5	5	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
Chloramines (ppm)	N/A	MRDL = 4	MRDLG = 4	No	Water additive used to control microbes	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
Chlorine (ppm)	Average-.16 .09-.28	MRDL = 4	MRDLG = 4	No	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Chlorine dioxide (ppb)	ND	MRDL = 800	MRDLG = 800	No	Water additive used to control microbes	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
Chlorite (ppm)	ND	1	.8	No	By-product of drinking water chlorination	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous systems effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

Chromium (ppb)	ND	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Cyanide (ppb)	ND	200	200	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
Fluoride (ppm)	ND	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Mercury (inorganic) (ppb)	ND	2	2	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Nitrate (as Nitrogen) (ppm)	ND-.92	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	(5 ppm through 10ppm) 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. (Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Nitrite (as Nitrogen) (ppm)	ND	1	1	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill, and if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Selenium (ppb)	ND	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
Thallium (ppb)	ND	2	0.5	No	Leaching from ore-processing sites; discharge from electronics, glass and drug factories	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>						
2,4-D (ppb)	ND	70	70	No	Runoff from herbicides used on row crops	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

Acrylamide (ppm)	ND	TT	0	No	Added in water during sewage/wastewater treatment	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
Alachlor (ppb)	ND	2	0	No	Runoff from herbicide used on row crops	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
Atrazine (ppb)	ND	3	3	No	Runoff from herbicide used on row crops	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
Benzo(a)pyrene (PAH) (ppt)	ND	200	0	No	Leaching from linings of water storage tanks and distribution lines	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
Carborfuran (ppb)	ND	40	40	No	Leaching of soil fumigant used on rice and alfalfa	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or productive systems.
Chlordane (ppb)	ND	2	0	No	Residue of banned termiticide	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
Dalapon (ppb)	ND	200	200	No	Runoff from herbicide used on rights of way	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
Di (2-ethylhexyl) adipate (ppb)	ND	400	400	No	Discharge from chemical factories	Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience toxic effects such as weight loss, liver enlargement, or possible reproductive difficulties.
Di (2-ethylhexyl) phthalate (ppb)	ND	6	0	No	Discharge from rubber and chemical factories	Some people who drink water containing di (2-ethylhexyl) phthalate well in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
Dibromo-Chloropropane (DBCP) (ppt)	ND	200	0	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
Dinoseb (ppb)	ND	7	7	No	Runoff from herbicide used on soybeans and vegetables	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
Diquat (ppb)	ND	20	20	No	Runoff from herbicide use	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
Dioxin [2,3,7,8-TCDD] (ppq)	ND	30	0	No	Emissions from waste incineration and other combustion; discharge from chemical factories	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
Endothall (ppb)	ND	100	100	No	Runoff from herbicide use	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

Endrin (ppb)	ND	2	2	No	Residue of banned insecticide	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
Epichlorohydrin (ppm)	ND	TT	0	No	Discharge from industrial chemical factories; an impurity of some water treatment chemicals	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.
Ethylene dibromide (EDB) (ppt)	ND	50	0	No	Discharge from petroleum refineries	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
Glyphosate (ppb)	ND	700	700	No	Runoff from herbicide use	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
Heptachlor (ppt)	ND	400	0	No	Residue of banned pesticide	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
Heptachlor-epoxide (ppt)	ND	200	0	No	Breakdown of heptachlor	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
Hexachloro-benzene (ppb)	ND	1	0	No	Discharge from metal refineries and agricultural chemical factories	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
Hexachlorocyclopentadiene	ND	50	50	No	Discharge from chemical factories	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
Lindane (ppt)	ND	200	200	No	Runoff/leaching from insecticide used on cattle, lumber, gardens	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
Methoxychlor (ppb)	ND	40	40	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
Oxamyl (Vydate) (ppb)	ND	200	200	No	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
Polychlorinated biphenyl (PCBs) (ppt)	ND	500	0	No	Runoff from landfills; discharge of waste chemicals	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
Penta-chlorophenol (ppb)	ND	1	0	No	Discharge from wood preserving factories	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
Picloram (ppb)	ND	500	500	No	Herbicide runoff	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

Silvex (2,4,5-TP) (ppb)	ND	50	50	No	Residue of banned herbicide	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
Simazine (ppb)	ND	4	4	No	Herbicide runoff	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
Toxaphene (ppb)	ND	3	0	No	Runoff/leaching from insecticide used on cotton and cattle	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
<b>Volatile Organic Contaminants</b>						
Benzene (ppb)	ND	5	0	No	Discharge from factories; leaching from gas storage tanks and landfills	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
Carbon tetrachloride (ppb)	ND	5	0	No	Discharge from chemical plants and other industrial activities	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Chloro-Benzene (Monochlorobenzene) (ppb)	ND	100	100	No	Discharge from chemical and agricultural chemical factories	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
o-Dichlorobenzene (ppb)	ND	600	600	No	Discharge from industrial chemical factories	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
p-Dichlorobenzene (ppb)	ND	75	75	No	Discharge from industrial chemical factories	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
1,2-Dichloroethane (ppb)	ND	5	0	No	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
1,1-Dichloroethylene (ppb)	ND	7	7	No	Discharge from industrial chemical factories	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
cis-1,2-Dichloroethylene (ppb)	ND	70	70	No	Discharge from industrial chemical factories	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
Trans-1,2-Dichloroethylene (ppb)	ND	100	100	No	Discharge from industrial chemical factories	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
Dichloromethane (ppb)	ND	5	0	No	Discharge from pharmaceutical and chemical factories	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
1,2-Dichloropropane	ND	5	0	No	Discharge from industrial chemical	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

(ppb)					factories	
Ethylbenzene (ppb)	ND	700	700	No	Discharge from petroleum factories	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
Haloacetic Acids (HAA) (ppb)	ND	60	NA	No	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Methyl tertiary-butyl ether (MtBE) (ppb)	ND	13	13	No	A gasoline additive	The New Hampshire Bureau of Health Risk Assessment considers MtBE a possible human carcinogen. Some people who drink water containing MtBE in excess of the MCL over many years could experience problems with their kidneys and may have an increased risk of getting cancer.
Styrene (ppb)	ND	100	100	No	Discharge from rubber and plastic factories; leaching from landfills	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
Tetrachloroethylene (ppb)	ND	5	0	No	Discharge from factories and dry cleaners	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
1,2,4-Trichlorobenzene (ppb)	ND	70	70	No	Discharge from textile-finishing factories	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
1,1,1-Trichloroethane (ppb)	ND	200	200	No	Discharge from metal degreasing sites and other factories	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
1,1,2-Trichloroethane (ppb)	ND	5	3	No	Discharge from industrial chemical factories	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
Trichloroethylene (ppb)	ND	5	0	No	Discharge from metal degreasing sites and other factories	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Total Trihalomethanes (TTHM) (Bromodichloromethane Bromoform Dibromochloromethane Chloroform) (ppb)	ND-.00071	80	N/A	No	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Toluene (ppm)	ND	1	1	No	Discharge from petroleum factories	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
Vinyl Chloride (ppb)	ND	2	0	No	Leaching from PVC piping; discharge from plastic factories	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

Xylenes (total contaminants listed below) M/P-Xylenes O-Xlyene (ppm)	ND	10	10	No	Discharge from petroleum factories; discharge from chemical factories	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
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\*If applicable report average and range and date sampled if prior to the reporting year. Level detected must be reported as whole number, see Env-Dw 811, Appendix B for conversions:

### PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS

Contaminant (Units)	Level Detected	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Perfluorohexane sulfonic acid (PFHxS) (ppt)	ND-4.51	18	0	No	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems	Some people who drink water containing perfluorohexane sulfonic acid (PFHxS) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, or may experience increased cholesterol levels. It may also lower a women's chance of getting pregnant.
Perfluorononanoic acid (PFNA) (ppt)	ND	11	0	No	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems	Some people who drink water containing perfluorononanoic acid (PFNA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, or may experience increased cholesterol levels.
Perfluorooctane sulfonic acid (PFOS) (ppt)	ND-13.2	15	0	No	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems	Some people who drink water containing perfluorooctane sulfonic acid (PFOS) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.
Perfluorooctanoic acid (PFOA) (ppt)	ND-4.83	12	0	No	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems	Some people who drink water containing perfluorooctanoic acid (PFOA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.

## 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)	3-120	2019-2021	N/A	250	Wastewater, road salt, water softeners, corrosion
Fluoride (ppm)	ND		N/A	2	
Iron (ppm)	ND-.056	2019-2021	N/A	0.3	Geological
Manganese (ppm)	ND-.42	2019-2021	N/A	0.05	Geological
Nickel	ND-.0021	2019-2021	N/A	N/A	Geological; electroplating, battery production, ceramics
PH (ppm)	6.59-7.33		N/A	6.5-8.5	Precipitation and geology
Sodium (ppm)	ND-71	2019-2021	N/A	100-250	We are required to regularly sample for sodium
Sulfate (ppm)	3.3-9.1	2019-2021	N/A	250	Naturally occurring
Zinc (ppm)	.0094-.056	2019-2021	N/A	5	Galvanized pipes