

2021 Consumer Confidence Report

Emerald Lake Village District

PWS ID# 1141020

Introduction

Like any responsible public water system, our mission is to help our NH communities maintain public health through drinking water supply. We do this by tailoring and carrying out preventative maintenance checks and services to the individual water system to ensure a strong and reliable water supply system. We adhere to the EPA and NH DES regulations and master sampling schedule to continuously monitor water quality and ensure the water being delivered to your home is safe for consumption.

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 begun/completed leak detection and multiple repairs throughout distribution, as well as replacing or repairing curb stops, we have been able to cut down on the bulk deliveries to the community. In the coming year we intend to continue our investigation into the leaks that may be surfacing and monitoring distribution.

These investments along with on-going operation and maintenance costs are vital to the system integrity and ability to deliver clean, safe and reliable drinking water to your home. 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.

NOW IT COMES WITH A LIST OF INGREDIENTS.



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 infor-

mation. 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?

Your community's water source comes from 8 Bedrock Wells, 1 water treatment plant, 1 water storage tank, 4 underground meter pits and 13 miles of water mains. The system supplies water to approximately 540 homes with an average population of 1,300.

BRW 1/Hummingbird Lane

BRW 6/7/8/9/11 Patten Hill

BRW 4/Meetinghouse- 50' S of PH

Mary Rowe Well – 220' NE of PH

In addition, due to high water use, drought, leaks(s), we had to purchase bulk water throughout the summer into the beginning of winter. .

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 protec-

tion area, a list of potential and known contamination sources, and a summary of available protection options. N/A

Note: This information is over UKN 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 at the DES Drinking Water Source Assessment website at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm>.

How can I get involved?

For more information about your drinking water, please call Emerald Lake Village District at 603-464-3128 email info@elvdnh.com or Aquamen Water Solutions LLC at 603-397-7814 email info@aquamenwatersolutions.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.

Violations and Other information:

10/02/2020 failure to correct SIG DEF

Definitions:

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 possi-

ble, 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

If Lead is present the following statement must be included.

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>

NOTICE ABOUT YOUR DRINKING WATER

Failure to Correct a Significant Deficiency

Public Water System Name: **EMERALD LAKE VILLAGE DISTRICT** PWS ID: **1141020**

We are required to correct significant water system deficiencies identified by Department of Environmental Services (NHDES). We failed to take the required action by the established date.

This is not an emergency. If it had been, you would have been notified immediately. We do not know of any case of contamination. However, until the problem is corrected, there is an increased chance that disease causing organisms could contaminate the water supply and potentially cause an illness.

Inadequately treated or inadequately protected 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. These symptoms, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What should I do? There is nothing you need to do at this time. You do not need to boil your water or take other corrective actions.

The table below lists the outstanding significant deficiency(ies), when correction of the deficiency(ies) was due and the corrective action we have (or will be) taking.

Significant Deficiency(ies) Noted	Date(s) Correction was Due
Source Water Capacity Deficiencies	October 2019
Deficiency in Management of Leaks and Conservation	October 2019

Steps being taken to correct the situation: Asset Management Plan completed; being used as guide for water repairs and main replacements. 2021 Annual Meeting will ask for OK of \$1.26M loan to replace water mains on 3 streets; 2021 budget includes 2 Zone Meters and Transducers for all well; new well has been drilled and is in process of pilot testing with goal of being online early summer 2021. **Expected Resolution Date: 2021**

Contact Name: Deborah Kardaseski, Administrator Company: Emerald Lake Village District

Address: 147 W. Main, Suite 103, PO Box 1753, Hillsborough, NH 03244 Telephone Number: 603-464-3128

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example; people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

NOTICE ABOUT YOUR DRINKING WATER

Fluoride Secondary Maximum Contaminant Level (SMCL) Exceedance

Public Water System Name: <u>Emerald Lake Village District</u> PWS ID: <u>1141020</u>

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. Your drinking water test result is above the Secondary Maximum Contaminant Level (SMCL) for the following:

Contaminant and SMCL	Detected Level	Date Sampled	Running Annual Average	Compliance Period
Fluoride 2.0 mg/L	2.8 mg/l	11/24/2020	3.1 mg/l	2020

This is not an emergency. If it had been you would have been notified immediately. *This is an alert about your drinking water and a cosmetic dental problem that might affect children under 9 years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2.0 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).*

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4.0 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4.0 mg/L of fluoride, but we are required to notify you when we discover that fluoride levels in your drinking water exceed 2.0 mg/L because of this cosmetic dental problem.

What should I do? Children under the age of nine (9) should use an alternative source of water that is low in fluoride. In addition, you may want to consult your dentist about whether to avoid dental products containing fluoride. Adults and children over age nine should consult their dentist or doctor and show him/her this notice to determine if an alternate source of water low in fluoride should be used. General health related questions may be directed to the EPA Safe Drinking Water Hotline at 1-800-426-4791. *Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP*

<p>Steps being taken to correct the situation:</p> <p><u>We are continuing to monitor fluoride levels. We will inform you if levels exceed 4.0 mg/L.</u></p> <p>Contact Name: <u>Craig McGraw & Harold Smith</u> Company: <u>Aquamen Water Solutions LLC</u></p> <p>Address: <u>1324 Franklin Pierce HWY Barrington, NH 03825</u> Telephone Number: <u>603-905-9073</u></p>

Please share this information with all the other people who have children that drink this water, especially those who may not have received this notice directly (for example; people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

System Name: Emerald Lake Village District PWS ID: 1141020

2021 Report (2020 data)

BULK WATER DELIVERIES			
Bulk Water Source	Dates of Water Delivery	Gallons Delivered	Reason for Delivery
1471010, 1121010	06/22, 06/23, 06/24, 06/25, 06/30	156,000 gallons, 26 deliveries	Source was having trouble keeping up with demand
1121010, 1911010, 1471010	07/02, 07/06, 07/07, 07/08, 07/09, 07/14, 07/22, 07/27	264,000 gallons, 44 deliveries	Source was having trouble keeping up with demand
14171010, 1141010,	08/04, 08/12, 08/17, 08/19, 08/24, 08/27, 08/31	426,000 gallons, 71 deliveries	Source was having trouble keeping up with demand
1471010, 1141010, 1621010	09/03, 09/08, 09/10, 09/14, 09/17, 09/21, 09/24, 09/28	522,000 gallons, 87 deliveries	Source was having trouble keeping up with demand
1471010, 1141010,	10/01, 10/05, 10/08, 10/13, 10/15, 10/20, 10/22, 10/26, 10/29	330,000 gallons, 55 deliveries	Source was having trouble keeping up with demand
1471010, 1141010	11/02, 11/05, 11/12, 11/19, 11/25	215,000 gallons, 35 deliveries	Source was having trouble keeping up with demand
1471010, 1141010	12/03, 12/22, 12/30	96,000 gallons, 16 deliveries	Source was having trouble keeping up with demand They have located and repaired many leaks, this has greatly helped reduce the amount of bulk water deliveries need for the community.

If a drinking water public notice, MCL, Monitoring/Reporting, or treatment technique violation has occurred, the following table should be used to explain the violation and health effects:

VIOLATIONS					
VIOLATIONS	Date of violation	Explain violation	Length of violation	Action taken to resolve	Health Effects (Env-Dw 804-810)
Public notice					N/A
Monitoring and Reporting (M/R)					N/A
MCL					<i>Insert health effects language for contaminant from Env-Dw 804-810</i>
<u>E.coli</u> MCL		<i>Insert required language from Env-Dw 811.17(h)</i>			<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)					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					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.

The Revised Total Coliform Rule requires an assessment or an investigation of the water system when certain conditions occur:

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					<i>During the past year we failed to correct all identified defects that were found during the assessment.</i>
Level II					<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.					<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	Number of assessments completed in the	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
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	reporting year	reporting year			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					During the past year we failed to conduct all of the required assessment(s).
Level II					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.					<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.

SIGNIFICANT DEFICIENCY

Significant deficiency description and date of sanitary survey	Source of <i>E. coli</i>	Date deficiency was addressed or corrected	Approved plan and timeframe for correction	Health Effects (Env-Dw 811.21)

*The value must be reported as whole number, see Env-Dw 811, Appendix B for conversions:

LEAD AND COPPER

Contaminant (Units)	Action Level	90 th percentile sample value *	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	0.093	09/24/20		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	0.001	09/24/20		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.

*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:

DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected*	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Microbiological Contaminants						
<i>E. coli</i> Bacteria	Identify total # of positive samples.	0	0		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)		TT	N/A		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)	Identify the highest average monthly value, the highest monthly value, and explain why you are measuring for turbidity. Identify the highest single measurement & the lowest monthly percentage of samples meeting turbidity limits.	TT	N/A		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.
Radioactive Contaminants						
Compliance Gross Alpha (pCi/L)		15	0		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)		30	0		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)		5	0		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.
Inorganic Contaminants						
Antimony (ppb)	<0.001 MG/L 11/24 ND 11/09/20	6	6		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 02/12/20 ND 04/16/20 ND 05/11/20 0.001 MG/L 08/17/20 0.001 MG/L 11/24/20 0.0041 MG/L 02/12/20 0.0042 04/16/20 0.005 MG/L 08/17/20 0.004 MG/L 10/23/20 0.005 MG/L 02/12/20	10	0		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 ppm) 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)		7	7		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)	<0.010 MG/L 11/24/20 0.003 MG/L 10/23/20	2	2		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)	<0.001 MG/L 11/24/20 ND 10/23/20	4	4		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)		10	0		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)	<0.001 MG/L 11/24/20 ND 10/23/20	5	5		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)		MRDL = 4	MRDLG =4		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)		MRDL = 4	MRDLG = 4		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)		MRDL = 800	MRDLG = 800		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)		1	.8		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)	<0.010 MG/L 11/24/20 0.01 MG/L 0.02 10/23/20	100	100		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)	<0.005 MG/L 11/24/20 ND 10/23/20	200	200		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)	3.0 MG/L 02/12/20 3.1 MG/L 03/04/20 3.0 MG/L 04/16/20 3.1 MG/L 05/11/20 3.84 MG/L 08/18/20 2.8 MG/L 11/24/20 3.4 MG/L 12/13/20	4	4		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 10/23/20 <0.0066 MG/L 11/24/20	2	2		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)	<1.0 MG/L 11/24/20	10	10		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)		1	1	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)	<0.010 MG/L 11/24/20	50	50	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)	<0.001 MG/L 11/24/20	2	0.5	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.
Synthetic Organic Contaminants including Pesticides and Herbicides					
Silvex (2,4,5-TP) (ppb)	<0.010 MG/L 11/24/20 ND 10/23/20	50	50	Residue of banned herbicide	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
Volatile Organic Contaminants					
Benzene (ppb)	ND 10/23/20 <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	5	0	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 10/23/20 <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	5	0	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 10/23/20	100	100	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)	1,2- <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20 1,3- <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	600	600	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)	1,4- <0.5 UG/L 11/24/20 <0.5 UG/L	75	75	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.

	12/14/20					
1,2-Dichloroethane (ppb)	1,1- <0.5 UG/L 11/24/20 <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	5	0		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 10/23/20 <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	7	7		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 10/23/20 <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	70	70		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)	<0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	100	100		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)	<0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	5	0		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 (ppb)	1,2- <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20 1,1- <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20 1,3- <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	5	0		Discharge from industrial chemical factories	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.
Ethylbenzene (ppb)	<0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	700	700		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.
Methyl tertiary-butyl ether (MtBE) (ppb)	ND 10/23/20	13	13		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)	<0.8 UG/L 12/14/20	100	100		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)	<0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	5	0		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)	<0.8 UG/L 11/24/20 <0.8 UG/L 12/14/20	70	70		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)	<0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	200	200		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)	<0.5 UG/L 11/14/20 ND 10/23/20 <0.5 UG/L 11/24/20	5	3		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 10/23/20 <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	5	0		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 10/23/20 <0.5 UG/L 11/24/20 <0.5 UG/L 12/14/20	80	N/A		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 10/23/20	1	1		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)	<0.9 UG/L 12/14/20	2	0		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)	<1.5 UG/L 11/24/20 <1.5 UG/L 12/14/20	10	10		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.

*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 03/27/20	18	0		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 03/27/20	11	0		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 03/27/20	15	0		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 03/27/20	12	0		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)	ND 11/24/20, 16 MG/L 11/24/20		N/A	250	Wastewater, road salt, water softeners, corrosion
Fluoride (ppm)			N/A	2	<i>Add Health effects language from Env-Dw 806.11 or attach public notice to CCR</i>
Iron (ppm)			N/A	0.3	Geological
Manganese (ppm)	ND 10/23/20, <0.010 MG/L 11/24/20		N/A	0.05	Geological
Nickel			N/A	N/A	Geological; electroplating, battery production, ceramics
PH (ppm)	7.07 SU 11/24/20		N/A	6.5-8.5	Precipitation and geology

Sodium (ppm)	7.8 MG/L 10/23/20 16 MG/L 11/24/20		N/A	100-250	We are required to regularly sample for sodium
Sulfate (ppm)	14 MG/L 10/23/20, 12 MG/L 11/24/20		N/A	250	Naturally occurring
Zinc (ppm)	0.037 MG/L 10/23/20		N/A	5	Galvanized pipes

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
UCMR detects	<i>Average & range</i>				<i>Explain federal monitoring requirement</i>
AGQS detects	<i>Level detected</i>				
Radon (pCi/L)	<i>Results & significance if present in finished water - see Env-Dw 811.18</i>		<i>e.g. aeration</i>		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.
Cryptosporidium	<i>Results and significance - see Env-Dw 811.18</i>				