

# **2025 CONSUMER CONFIDENCE REPORT**

(2024 Data)

EPA ID #: 1531010



### 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).

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by Public Water Systems. These regulations are defined by the Safe Drinking Water Act (SDWA) which was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources; rivers, lakes, reservoirs, springs, and ground water wells. The SDWA authorizes the EPA to set National health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. US EPA, the State of NH Department of Environmental Services (NH DES) and Merrimack Village District (MVD) work together to make sure that these standards are met. The SDWA defines "contaminant" as any physical, chemical, biological or radiological substance or matter in water. Drinking water may reasonably be expected to contain at least small amounts of some contaminants. Some contaminants may be harmful if consumed at certain levels in drinking water. The presence of contaminants does not necessarily indicate that the water poses a health risk. **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.

What about bottled water regulations? The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Why are there contaminants in my water? Drinking water, including bottled water, may reasonably be expected to contain at least a small amount 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 contacting the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at <u>800-426-4791</u> or online at <u>www.epa.gov/safewater</u>.

### INTRODUCTION

The Merrimack Village District's (MVD) Mission is *"To provide the best Quality, Quantity, and Cost-Conscious water that meets or exceeds standards for Merrimack's consumption and fire protection – from source to tap."* MVD achieves this by servicing and maintaining approximately 930,800 feet of Water Mains, 969 Fire Hydrants, 6 Groundwater Wells, 3 Water Storage Tanks, an Iron & Manganese Treatment Facility, three Booster Stations, three PFAS Treatment Facilities, as well as performing extensive water sample collection and analysis. Throughout 2024 we collected over <u>1,500</u> routine water samples for compliance testing of over 160 drinking water contaminants. We're pleased to report that the water quality results significantly surpass the standards established by NHDES and EPA, including the regulations for PFAS.

In the past year, MVD has collaborated with the EPA to evaluate alternative media options for PFAS removal through pilot testing at the Wells 4 & 5 Treatment Facility. Seven different media types were selected for testing, with the objective of decreasing the frequency of media replacements.

### 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.

### WHAT IS THE SOURCE OF MVD'S DRINKING WATER?

100% of MVD's water comes from groundwater. Groundwater is precipitation that has soaked through the ground's surface and is stored where there are open spaces between rocks and soil. This water is pumped from wells located in various parts of Merrimack and Hollis. Water from each well is filtered and distributed through a network of water mains to residential, municipal, commercial and industrial locations. The water from MVD's wells is distributed through MVD's water mains which are an interconnecting looped system. Depending on the situation, wells may be on or off at any given point in time. The well source for the water provided may vary based on which wells are on and producing water.

### 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/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium (found in surface water) and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791 or online at www.epa.gov/safewater.

### SOURCE WATER ASSESSMENT SUMMARY

In an effort to assess the vulnerability of each New Hampshire's public water supply sources, the New Hampshire Department of Environmental Services (NHDES) prepared drinking water Source Water Assessment Reports for all public water systems between 2000 and 2003. The Source Water Assessment Reports include a map of each Source Water Protection Area (SWPA), a list of potential and known contamination sources, as well as a summary of available protection options. The Susceptibility Rating can be viewed on the chart located on this page.

| <b>)A</b> /all # | Data Assessment Completed | Susceptibility Rating |        |     |  |  |  |
|------------------|---------------------------|-----------------------|--------|-----|--|--|--|
| wen #            | Date Assessment Completed | High                  | Medium | Low |  |  |  |
| 001              | 02/20/2002                | 1                     | 2      | 9   |  |  |  |
| 003              | 02/20/2002                | 1                     | 2      | 9   |  |  |  |
| 004              | 02/20/2002                | 3                     | 4      | 5   |  |  |  |
| 005              | 02/20/2002                | 4                     | 3      | 5   |  |  |  |
| 007              | 03/31/2000                | 1                     | 2      | 9   |  |  |  |
| 008              | 02/20/2002                | 1                     | 2      | 9   |  |  |  |
| 009              | 02/20/2002                | 1                     | 2      | 9   |  |  |  |

**Note:** As indicated on the chart, the results of MVD's Source Water Assessment Report are from 2000 and 2002. This information is 23-25 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 Source Water Assessment Report is available for review at MVD's office located at 2 Greens Pond Rd Merrimack, NH. For more information, call MVD's Business Manager/Water Quality Specialist, Jill Lavoie at 603-424-9241 x: 103 or email <u>ilavoie@mvdwater.org</u>, or visit the <u>NHDES website https://www.des.nh.gov/water</u>.

### HOW DO I GET INVOLVED?

For more information about your drinking water please contact either MVD's Business Manager/Water Quality Specialist, Jill Lavoie either by phone at 603-424-9241 x: 103 or by emailing <u>ilavoie@mvdwater.org</u> or MVD's Superintendent, Ronald Miner, Jr. by phone at 603-424-9241 x: 107 or by emailing <u>rminer@mvdwater.org</u>. Additionally, MVD's Board of Commissioners (BOC) meets on the 3<sup>rd</sup> Monday of each month (except holidays). The BOC Meeting includes a Public Session as listed on the agenda for "Questions from the Public/Press". Questions can be submitted in writing to MVD via email at <u>customerservice@mvdwater.org</u>, or by mail to 2 Greens Pond Road, Merrimack, NH 03054. Please refer to MVD's website <u>www.mvdwater.org</u> for meeting details (including dates, times, full agendas).

### WATER QUALITY

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. Last year, MVD conducted water sampling to assess various potential contaminants, including inorganic substances (such as salts and metals), organic chemicals (both synthetic and volatile compounds), and radioactive materials. The data tables within this report reflect substances that were detected in MVD's water sources in 2024. Additionally, in accordance with CCR reporting requirements, historical data for previous results are included for any substances that were not required to be monitored in the past year but were tested for and detected at some point within the past five years.

Please note, during 2024 MVD temporarily obtained water from Pennichuck Water Works; this was necessary in order to supplement MVD's sources during routine maintenance within our water system. As such, we have included the Pennichuck Water Works testing results from their CCR. Pennichuck Water Works complete CCR can be found on their website at <a href="https://pennichuck.com/water-quality/water-quality-reports/">https://pennichuck.com/water-quality-reports/</a>. The direct link to their 2024 report is <a href="https://pennichuck.com/pdf/CCR-A0.pdf">https://pennichuck.com/water-quality/water-quality-reports/</a>. The direct link to their 2024

All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing completed in the prior calendar year. The EPA and/or the NHDES require us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or because the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one-year-old. The data tables included in this report may have terms and abbreviations that are not familiar; to help with understanding this information we have provided *"IMPORTANT DRINKING WATER DEFINITIONS"* on page 10.



### WATER SERVICE LINE PROGRAM (WSLP)

The United States Environmental Protection Agency (EPA) is responsible for setting drinking water standard and regulations for <u>ALL</u> public water systems (PWS) in the United States. In New Hampshire, these regulations are administered by the New Hampshire Department of Environmental Services' (NHDES) Drinking Water and Groundwater Bureau (DWGB). One of the many EPA regulations is the Lead and Cooper Rule (LCR), recently updated to the Lead and Copper Rule Revisions (LCRR). While lead, in its natural state, is seldom present in New Hampshire's drinking water sources, it can enter the water supply through the deterioration of pipes, plumbing fixtures, or the solder used to connect those components. As such, it's important for property owners to know the material type for internal plumbing as it could have a direct health impact. Because of this, part of the LCRR includes the Lead Service Line Inventory and Replacement Plan (LSLI/R). The LSLI/R was developed to better protect against possible lead exposure in drinking water by providing information on the location and material type of each water service line connected to a public water system; the goal being identification and replacement of all lead water service lines as well as all galvanized steel downstream from a lead water service line as it can leach lead into the water. If the service line is identified as being lead or another material type, of the following:

- The PWS owned portion of water mains/pipes that provide water supply
- The customer owned water service lines & plumbing at all service locations connected to the PWS.

Like all NH PWS, Merrimack Village District (MVD) is responsible for adhering to EPA and NHDES regulations. As part of MVD's compliance with the updated LCRR requirements, we developed and are actively engaged in our Water Service Line Program (WSLP). One part of the WSLP initiative involves the inspection and documentation of water service lines and plumbing materials. MVD staff have been obtaining this information while onsite at both existing and newly connected service locations during routine/scheduled appointments. Prior to the WSLP, MVD did not maintain any records of water service line or plumbing material information as these components are not installed, owned or maintained by MVD. Consequently, while we have successfully gathered information for a substantial number of locations, there are still many for which this information, MVD is requesting that locations which receive the notice perform an inspection of the water service line at their location and provide the results to MVD. Instructions and submission information for Water Service Line Inspection Information can be found online - <a href="https://www.mvdwater.org/water-service-line-inspection-information/">https://www.mvdwater.org/water-service-line-inspection-information/</a> If customers are unable to perform an inspection, an appointment can be arranged for inspection by MVD. Once inspections are completed and the water service line material has been identified, MVD will update their records, share the information with the property owner, and if necessary, provide a recommendation for moving forward.

### LEAD SERVICE LINE INVENTORY

The Water Service Line Map is part of MVD's WSLP. The Water Service Line Map is an interactive tool that provides information about *both* MVD's service connections & Property Owner's Water Service Lines. The map reflects results from the Lead Service Line Inventory, which is part of the compliance requirements of the LCRR and can be viewed online at <u>https://pws-ptd.120wateraudit.com/merrimackvillagenh</u>. Complete details and additional information about MVD's WSLP can be found on our website at <u>https://www.mvdwater.org/water-service-line-program/.</u>

Corrosion control treatment is used to prevent pipe corrosion and the presence of metals in drinking water. This is achieved by adjusting the water's chemistry to reduce its corrosivity. In addition to routine monitoring and assessing, MVD's utilizes phosphate for pH adjustment to control of the corrosivity of water.

### INFORMATION ABOUT LEAD IN DRINKING WATER

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. MVD is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact MVD's Business Manager, Jill Lavoie at 603-424-9241 x: 103 or by email to <u>ilavoie@mvdwater.org</u>. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <u>https://www.epa.gov/safewater/lead</u>.

### **HEALTH EFFECTS OF LEAD**

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are ex-posed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.



The following data tables reflect substances that were detected in MVD's water sources in 2024. Additionally, in accordance with CCR reporting requirements, historical data for previous results are included for any substances that were not required to be monitored in the past year but were tested for and detected at some point within the past five years.

|                        | LEAD AND COPPER<br>Results from Multiple Sample Sites Located Throughout the MVD's Water System |   |           |                              |  |                      |  |  |  |  |  |
|------------------------|---|---|-----------|------------------------------|--|----------------------|--|--|--|--|--|
| Contaminant<br>(Units) | Action Level<br>(AL)  | 90 <sup>th</sup> Percentile<br>Sample Value | Date      | # of Sites<br>above AL       | Range of Tap Sampling<br>Results       | Exceedance<br>Yes/No | Likely Source of Contamination   |  |  |  |  |
| Copper<br>(ppm)        | 1.3   | 0.155                                       | 7/12/2024 | 0                            | AVERAGE: 0.095<br>RANGE: 0.011 - 0.402 | NO                   | Corrosion of household plumbing systems; erosion<br>of natural deposits; leaching from wood<br>preservatives |  |  |  |  |
| Lead<br>(ppb)          | 15  | 0   | 7/12/2024 | *1<br>Refer to<br>NOTE below | AVERAGE: 12<br>RANGE: 5-21             | NO                   | Corrosion of household plumbing systems, erosion of natural deposits   |  |  |  |  |

\*NOTE: A total of 63 locations were sampled for Lead and Copper. Of these, 62 samples were BELOW the Action Level. One location recorded a result of 0.021 mg/L, which exceeds the Action Level; this location was identified as having pre-existing interior plumbing issues, which are managed with an existing lead filtration system. The initial sample was collected without filtration, so the result does not represent the levels that would be measured after filtration.

|                                   | INORGANIC CONTAMINANTS                 |      |     |      |                     |   |  |  |
|-----------------------------------|--|------|-----|------|---------------------|---|--|--|
| Contaminant<br>(Units)            | Level<br>Detected                      | Date | MCL | MCLG | Violation<br>YES/NO | Likely Source of<br>Contamination   | Health Effects of Contaminant  |  |
| Barium<br>(ppm)                   | AVERAGE: 0.035<br>RANGE: 0.025 - 0.044 | 2023 | 2   | 2    | NO                  | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits        | Some people who drink water containing barium in<br>excess of the MCL over many years could<br>experience an increase in their blood pressure.   |  |
| Chromium<br>(ppb)                 | AVERAGE: 3<br>RANGE: 1-5               | 2023 | 100 | 100  | NO                  | Discharge from steel and pulp mills; erosion<br>of natural deposits                               | Some people who use water containing chromium<br>well in excess of the MCL over many years could<br>experience allergic dermatitis.  |  |
| Nitrate<br>(as Nitrogen)<br>(ppm) | AVERAGE: 0.93<br>RANGE: 0 - 2.80       | 2024 | 10  | 10   | NO                  | Runoff from fertilizer use; leaching from<br>septic tanks, sewage; erosion of natural<br>deposits | <ul> <li>(5 ppm through 10 ppm) Nitrate in drinking water<br/>at levels above 10 ppm is a health risk for infants of<br/>less than six months of age. High nitrate levels in<br/>drinking water can cause blue baby syndrome.</li> <li>Nitrate levels may rise quickly for short periods of<br/>time because of rainfall or agricultural activity. If<br/>you are caring for an infant, you should ask for<br/>advice from your health care provider.</li> </ul> |  |

|   |  |      |     | VUI  |                     | RGANIC CONTAININ                             | VAIN I S  |
|---|--|------|-----|------|---------------------|--|---|
| Contaminant<br>(Units)  | Level<br>Detected                        | Date | MCL | MCLG | Violation<br>YES/NO | Likely Source of<br>Contamination            | Health Effects of Contaminant   |
| Total Trihalomethanes<br>(TTHM)<br>(Bromodichloro-<br>methane Bromoform<br>Dibromochloro-<br>methane Chloroform)<br>(ppb) | AVERAGE:<br>0.06<br>RANGE:<br>0.06 - 1.2 | 2024 | 80  | N/A  | ΝΟ                  | By-product of drinking<br>water chlorination | Some people who drink water containing trihalomethanes in excess of<br>the MCL over many years may experience problems with their liver,<br>kidneys, or central nervous systems, and may have an increased risk of<br>getting cancer. |

|                             | SECONDARY CONTAMINANTS                 |      |                                    |  |   |   |   |  |  |
|-----------------------------|--|------|------------------------------------|--|---|---|---|--|--|
| Secondary<br>MCLS<br>(SMCL) | Level Detected                         | Date | Treatment<br>Technique<br>(If Any) | SMCL   | 50 % AGQS<br>(Ambient<br>Groundwater<br>Quality Standard) | AGQS (Ambient<br>Groundwater Quality<br>Standard) | Specific Contaminant Criteria and Reason for<br>Monitoring  |  |  |
| Chloride<br>(ppm)           | AVERAGE: 181.5<br>RANGE: 128 - 235     | 2023 | N/A                                | 250  | N/A   | N/A   | Wastewater, road salt, water softeners, corrosion           |  |  |
| Manganese<br>(ppm)          | AVERAGE: 0.003<br>RANGE: 0.002 - 0.004 | 2023 | N/A                                | 0.05   | 0.15  | 0.3   | Geological  |  |  |
| Nickel (ppm)                | AVERAGE: 0.010<br>RANGE: 0 - 0.015     | 2023 | N/A                                | Not established;<br>reporting is<br>required for<br>detections | 0.05  | 0.1   | Geological; electroplating, battery production,<br>ceramics |  |  |
| рН                          | AVERAGE: 7.69<br>RANGE: 7.62 - 7.76    | 2023 | N/A                                | 6.5-8.5<br>(Normal<br>Range)                                   | N/A   | N/A   | Precipitation and geology                                   |  |  |
| Sodium<br>(ppm)             | AVERAGE: 78.35<br>RANGE: 61.7 - 95     | 2023 | N/A                                | 100-250  | N/A   | N/A   | We are required to regularly sample for sodium              |  |  |
| Sulfate<br>(ppm)            | AVERAGE: 12.1<br>RANGE: 11.4 - 12.8    | 2023 | N/A                                | 250  | 250   | 500   | Naturally occurring   |  |  |
| Zinc (ppm)                  | AVERAGE: 0.423<br>RANGE: 0.031 - 0.815 | 2023 | N/A                                | 5  | N/A   | N/A   | Galvanized pipes  |  |  |

### **VOLATILE ORGANIC CONTAMINANTS**

| PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS |                   |      |     |      |                     |  |   |  |  |  |
|---|-------------------|------|-----|------|---------------------|--|---|--|--|--|
| Contaminant<br>(Units)                                  | Level<br>Detected | Date | MCL | MCLG | Violation<br>YES/NO | Likely Source of Contamination   | Health Effects of Contaminant   |  |  |  |
| Perfluorohexane<br>sulfonic acid (PFHxS)<br>(ppt)       | ND                | 2024 | 18  | 0    | NO                  |  | Some people who drink water containing perfluorohexane sulfonic acid<br>(PFHxS) in excess of the MCL over many years could experience<br>problems with their liver, endocrine system, or immune system, or may<br>experience increased cholesterol levels. It may also lower a woman's<br>chance of getting pregnant.   |  |  |  |
| Perfluorononanoic acid<br>(PFNA)<br>(ppt)               | ND                | 2024 | 11  | 0    | NO                  | Discharge from industrial<br>processes, wastewater treatment,<br>residuals from firefighting foam,<br>runoff/leachate from landfills and<br>septic systems | Some people who drink water containing perfluorononanoic acid<br>(PFNA) in excess of the MCL over many years could experience<br>problems with their liver, endocrine system, or immune system, or may<br>experience increased cholesterol levels.  |  |  |  |
| Perfluorooctane<br>sulfonic acid (PFOS)<br>(ppt)        | ND                | 2024 | 15  | 0    | NO                  |  | Some people who drink water containing perfluorooctane sulfonic acid<br>(PFOS) in excess of the MCL over many years could experience<br>problems with their liver, endocrine system, or immune system, may<br>experience increased cholesterol levels, and may have an increased risk<br>of getting certain types of cancer. It may also lower a woman's chance<br>of getting pregnant. |  |  |  |
| Perfluorooctanoic acid<br>(PFOA)<br>(ppt)               | ND                | 2024 | 12  | 0    | NO                  |  | Some people who drink water containing perfluorooctanoic acid<br>(PFOA) in excess of the MCL over many years could experience<br>problems with their liver, endocrine system, or immune system, may<br>experience increased cholesterol levels, and may have an increased risi<br>of getting certain types of cancer. It may also lower a woman's chance<br>of getting pregnant.        |  |  |  |

### **RESOURCE INFORMATION FOR PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)**

The most up to date information can be found on the following websites:

#### **NH PFAS Investigation:**

### https://www.pfas.des.nh.gov/

### NH Dept Health & Human Services:

https://www.dhhs.nh.gov/programs-services/environmental-health-and-you/poly-and-fluoroalkyl-substances-pfas

#### United States Environmental Protection Agency:

### https://www.epa.gov/pfas

MVD PFAS Information: Detailed information, including "Frequently Asked Questions", Notices, Planning/Financial info, Announcements, Media/Press Releases, as well as the analysis reports of water sampling test results, can be found on our website at www.mvdwater.org. Construction of the PFAS Treatment Facility for Wells 7 & 8 has been completed and is operational as of spring 2022. Construction of the Wells 2 & 9 PFAS Treatment Facility has been completed and is operational as of March 2023. The cost of these PFAS Treatment Facilities is approximatley \$14.5 million. These investments, along with on-going operations and maintenance costs, are supported by the voter approved budget as well as grants and loans. Additionally, MVD continues to pursue additional grants through NHDES, and we have filed suit in New Hampshire Superior Court against the parties responsible for the PFOA contamination of the MVD's wells.



### **PENNICHUCK WATER WORKS**

Please note, during 2024 MVD temporarily obtained water from Pennichuck Water Works; this was necessary in order to supplement MVD's sources during routine maintenance within MVD's water system. As such, we have included the Pennichuck Water Works testing results from their CCR. Pennichuck Water Works complete CCR can be found on their website at <a href="https://pennichuck.com/water-quality/water-quality-reports/">https://pennichuck.com/water-quality-reports/</a>. The direct link to their 2024 report is <a href="https://pennichuck.com/pdf/CCR-A0.pdf">https://pennichuck.com/water-quality/water-quality-reports/</a>.



### Pennichuck 2025 Consumer Confidence Report

Nashua EPA # 1621010

2024 Results

|                 | Dated     | 90th<br>Percentile | Action<br>Level | MCLG | # of Sites<br>Sampled | # Sites Above<br>Action Level | Violation<br>Yes/No | Typical Source of Contaminant  |
|-----------------|-----------|--------------------|-----------------|------|-----------------------|-------------------------------|---------------------|--|
| Lead (ppb)      | 8/23/2023 | ND                 | 15              | 0    | 53                    | 0                             | No                  | Corrosion of household plumbing<br>systems, erosion of natural deposits                                      |
| Copper<br>(ppm) | 8/23/2023 | 0.188              | 1.3             | 1.3  | 53                    | 0                             | No                  | Corrosion of household plumbing<br>systems; erosion of natural deposits;<br>leaching from wood preservatives |

| DISINFECTION BY-P              | RODUCTS           |                    |                   |             |              |                     |   |
|--------------------------------|-------------------|--------------------|-------------------|-------------|--------------|---------------------|---|
|                                | Dated             | Hightest<br>Detect | Range<br>Detected | MCL         | MCLG         | Violation<br>Yes/No | Typical Source of<br>Contaminant          |
| Chlorine (ppm)                 | Weekly<br>2024    | AVG<br>0.72        | 0.02-1.42         | 4 -<br>MRDL | 4 -<br>MRDLG | Yes                 | Water additive used to control microbes   |
| Haloacetic Acids (ppb)         | Quarterly<br>2024 | RAA<br>10.5        | 4.9-13            | 60          | 0            | No                  | By-product of drinking water chlorination |
| Total Organic<br>Carbon(ppm)   | Monthly<br>2024   | AVG<br>0.65        | ND-0.77           | NA          | 0            | No                  | Naturally present in the environment      |
| Total Trihalomethanes<br>(ppb) | Quarterly<br>2024 | RAA<br>17.7        | 6.7-37            | 80          | 0            | No                  | By-product of drinking water chlorination |

### PENNICHUCK WATER WORKS CONTINUED

| INORGANIC CONTA | MINANTS  |                    |                   |     |      |                     |  |
|-----------------|----------|--------------------|-------------------|-----|------|---------------------|--|
|                 | Dated    | Hightest<br>Detect | Range<br>Detected | MCL | MCLG | Violation<br>Yes/No | Typical Source of<br>Contaminant   |
| Arsenic (ppb)   | 7/1/2024 | ND                 | NA                | 5   | 0    | No                  | Erosion of natural deposits; runoff from<br>orchards; runoff from glass and<br>electronics production wastes |
| Barium (ppm)    | 7/1/2024 | 0.0064             | NA                | 2   | 2    | No                  | Discharge of drilling wastes; discharge<br>from metal refineries; erosion of natural<br>deposits             |
| Nitrate (ppm)   | 7/1/2024 | 0.47               | NA                | 10  | 10   | No                  | Runoff from fertilizer use; leaching from<br>septic tanks, sewage; erosion of natural<br>deposits            |

| Organic Chemical Con  | tan          | ninants                  |                               |                                     |                     |                         |                     |   |  |  |
|---|--------------|--------------------------|-------------------------------|-------------------------------------|---------------------|-------------------------|---------------------|---|--|--|
|   | D            | ated                     | Hightest<br>Detect            | Range<br>Detected                   | MCL                 | MCLG                    | Violation<br>Yes/No | Typical Sou<br>Contamina  | irce of<br>nt  |  |
| Perfluorohexanesulfonic<br>acid (PFHxS)   | 10           | /8/2024                  | 0.773                         | NA                                  | 18                  | 0                       | No                  | Discharge fr<br>wastewater<br>firefighting fo<br>landfills and  | om industrial processes,<br>treatment, residuals from<br>pam, runoff/leachate from<br>septic systems |  |
| Perfluorononanoic acid<br>(PFNA)  | 4/1          | /2024                    | ND                            | NA                                  | 11                  | 0                       | No                  | Discharge from industrial processes,<br>wastewater treatment, residuals from<br>firefighting foam, runoff/leachate from<br>landfills and septic systems |  |  |
| Perfluorooctanesulfonic<br>acid (PFOS)  | 1/8          | 3/2024                   | ND                            | NA                                  | 15                  | 0                       | No                  | Discharge fr<br>wastewater<br>firefighting fo<br>landfills and  | om industrial processes,<br>treatment, residuals from<br>pam, runoff/leachate from<br>septic systems |  |
| Perfluorooctanoic acid<br>(PFOA)  | 10/8/2024 3. |                          | 3.9                           | NA                                  | 12                  | 0                       | No                  | Discharge from industrial processes,<br>wastewater treatment, residuals from<br>firefighting foam, runoff/leachate from<br>landfills and septic systems |  |  |
| RADIOLOGICAL CONT   | 'AM          | INANTS                   | ;                             |                                     |                     |                         |                     |   |  |  |
|   | D            | ated                     | Hightest<br>Detect            | Range<br>Detected                   | MCL                 | MCLG                    | Violation<br>Yes/No | Typical Sou<br>Contaminar   | irce of<br>nt  |  |
| Uranium (Mass) ppb  | 7/1          | /2024                    | 0                             | <1                                  | 30                  | 30                      | No                  | Erosion of n  | atural deposits  |  |
| Turbidity   |              | тт                       | Lowest<br>Samples             | Monthly % of<br>s                   | Highe<br>Valu       | est Detected<br>Ie      | l Daily             | Violation   | Typical Source of Contaminar   |  |
| Daily Compliance (NTU)  |              | 5                        |                               |                                     | 2.00 N              | ITU Noven<br>2024       | nber 25,            | No  | Soil Off   |  |
| Monthly Compliance* At least 100  |              |                          | 00 100 %                      | - All months of 2024                |                     |                         |                     | No  | Soil Off   |  |
| Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. |              |                          |                               |                                     |                     |                         |                     |   |  |  |
| *Monthly turbidity complia<br>samples each month must b   | nce<br>be be | is related<br>elow the t | to a specifi<br>curbidity lin | c treatment te<br>nits specified ir | chnique<br>the regu | (TT). Our s<br>lations. | system filte        | ers the water   | so at least 95% of our   |  |

### PENNICHUCK WATER WORKS CONTINUED

| SECONDARY CONTA                                       | MINANTS      |                   |                        |              |  |  |  |
|---|--------------|-------------------|------------------------|--------------|--|--|--|
|   | Dated        | Level<br>Detected | Treatment<br>Technique | SMCL         | 50 % AGQS<br>(Ambient<br>groundwater<br>quality<br>standard) | AGQS<br>(Ambient<br>r groundwate<br>quality<br>standard) | r<br>Typical Source of<br>Contaminant  |
| Chloride (ppm)  | 7/1/2024     | 51                | N/A                    | 250          | N/A  | N/A  | Wastewater, road salt, water<br>softeners, corrosion   |
| Fluoride (ppm)  | 7/1/2024     | 0                 | N/A                    | 4            | 2  | 4  | Erosion of natural deposits; water<br>additive which promotes strong<br>teeth; discharge from fertilizer and<br>aluminum factories |
| Hardness (ppm)  | 7/1/2024     | 11.7              | N/A                    | N/A          |  |  | Geological   |
| Iron (ppm)  | 7/1/2024     | 0                 | Filtration             | 0.3          | N/A  | N/A  | Geological   |
| Manganese (ppm)                                       | 7/1/2024     | 0.0153            | Filtration             | 0.05         | 0.15   | 0.3  | Geological   |
| рН  | 5/20/2024    | 7.7               | N/A                    | 6.5-8.5      | N/A  | N/A  | Precipitation and geology  |
| Sodium (ppm)  | 7/1/2024     | 34.1              | N/A                    | 100-250      | N/A  | N/A  | Road salt, septic systems (salt<br>from water softeners) We are<br>required to regularly sample for<br>sodium                      |
| Sulfate (ppm)   | 7/1/2024     | 5                 | N/A                    | 250          | 250  | 500  | Naturally occurring  |
| Zinc (ppm)  | 7/1/2024     | 0.19              | N/A                    | 5            | N/A  | N/A  | Galvanized pipes   |
| Secondary Maximum Co<br>tastes, odors, or colors in t | ntaminant Le | evel or SMC       | L: They identif        | y acceptable | concentration  | s of contamina   | ants which cause unpleasant  |

#### DEFINITION TERM Ambient Groundwater Quality Standard: An enforceable standard set by NHDES under Chapter 485 of the New Hampshire Safe Drinking AGQS Water Act. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must AL follow. BDL Below Detection Limit A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our LEVEL LASSESSMENT: water system. A very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has LEVEL II ASSESSMENT: occurred and/or why total coliform bacteria have been found in our water system on multiple occasions. Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as MCL feasible using the best available treatment technology. Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG MCLGs allow for a margin of safety. mg/L Milligrams per Liter Monitored Not Regulated MNR MPL State Assigned Maximum Permissible Level Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that MRDL addition of a disinfectant is necessary for control of microbial contaminants. Maximum Residual Disinfection Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to MRDLG health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. MRL Minimum Reporting Level N/A or NA Not Applicable Not Detected ND Monitoring not Required but Recommended. NR Nephelometric Turbidity Units: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the NTU effectiveness of our filtration system. Parts per Billion or Micrograms per Liter ( $\mu$ g/L) ppb Parts per million or Milligrams per Liter (mg/L) ppm Parts per Trillion ppt **Running Annual Average** RAA Secondary Maximum Contaminant Levels (Refer to MCL) SMCL TTHM **Total Trihalomethanes** Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. TT UCMR **Unregulated Contaminant Monitoring Rule** ug/L micrograms per Liter

### IMPORTANT DRINKING WATER DEFINITIONS

## WATER RESTRICTIONS/BANS

### **Purpose:**

- 1. To assist in managing the water distribution system ensuring we maintain adequate supply for residential and commercial usage.
- 2. Maintain the required level of water in the storage tanks to ensure ample pressure for potential use by the Town of Merrimack's Fire Department.
- 3. Comply with the New Hampshire Department of Environmental Services (NH DES) Drinking Water and Groundwater Bureau (DWGB) rules and regulations which requires that water providers to submit and enforce a "Conservation Plan". By fulfilling these requirements MVD is able to receive Federal and State grants and/or loans for any type of water system improvements.

### **Reasoning:**

MVD's water is supplied from groundwater wells, not surface water such as rivers, lakes, and reservoirs. The New Hampshire Department of Environmental Services (NHDES) Drinking Water and Groundwater Bureau (DWGB) permits each of MVD's wells to withdraw a maximum specified quantity of water from the ground per minute – this limits the amount of water we are permitted to produce at a time. Limiting the production amount allows water withdrawal from the aquifer in a controlled manner, which helps protect against seasonal fluctuations, and aids in maintaining sufficient supply. Irrigation and sprinklers have the highest rate of water consumption and causes substantially increased demands. Increased demand is supplied by three storage tanks; the tanks cannot fill up faster than what we are allowed to produce – having Water Restrictions allows the tanks to replenish and be ready for peak usage demands.

### **Details:**

MVD staff adjusts production rates to match demand and continuously monitors the water distribution system, the weather conditions and forecasts to determine if additional Watering Restrictions are necessary. Information about the current Watering Restriction as well as any changes to the Level of the Watering Restrictions can be found posted on signs/banners located throughout town, through email notification for subscribers, as well as on <u>MVD's Facebook page</u> and <u>website</u>. The Watering Restrictions/Bans page of our website also provides a *"Frequently Asked Questions"* document, an *"Irrigation Calculator"* which can provide an estimated water bill amount based on the usage, as well as links to the *"US Drought Monitor for NH"* and to the *"Known Water Use Restrictions"*.

Please be advised - MVD's Watering Restrictions and Bans are strictly enforced. Per MVD By-Law 1.D.: "The first violation will result in a warning letter. Further violations will result in termination of water service as well as fees."

### **There are FOUR Restriction Levels**

YEAR-ROUND ODD/EVEN LEVEL 1 LEVEL 2 LEVEL 3

#### ALL LEVELS ARE BASED ON THE STREET NUMBER & THE CALENDAR DATE.

Street Addresses ENDING with ODD numbers = ODD Calendar Dates. Street Addresses ENDING with EVEN numbers = EVEN Calendar Days. Condo Units – Please contact your Property Management Company for details.

#### Address/Date Examples:

123<u>4</u> Example St = Water on the 2nd, 4th, 6th, etc... 123<u>5</u> Example St = Water on the 1st, 3rd, 5th, etc...

| YEAR-ROUND | **YEAR-ROUND ODD/EVEN RESTRICTION ON IRRIGATION & LAWN WATERING ONLY**    |
|------------|---|
| ODD/EVEN   | ADDRESS/DATE SCHEDULE - "YEAR-ROUND ODD/EVEN" is the minimum restriction. |
|            | It is <u>ALWAYS</u> in place.   |

NOTE: On the 31<sup>st</sup> of March, May, July, August, and October ALL Address are permitted to water BETWEEN 5:00 AM-8:00 AM ONLY.

#### LEVEL 1 *ODD/EVEN – <u>TWICE</u> PER DAY Mornings: ONLY BETWEEN 5:00 AM-8:00 AM Evenings: ONLY BETWEEN 5:00 PM-8:00 PM*

i. Washing of streets, driveways, sidewalks or other impervious areas is prohibited.

ii. Washing of cars and boats at a non-commercial facility shall be restricted to odd/even dates by address/calendar dates as described above.

LEVEL 2

### ODD/EVEN – <u>ONCE</u> PER DAY

### ONLY BETWEEN 5:00 AM-8:00 AM

*i.* Washing of streets, driveways, sidewalks or other impervious areas is prohibited.

*ii.* Washing of cars and boats at a non-commercial facility shall be restricted to odd/even dates by address/calendar dates as described above.

**LEVEL 3** 

### NO OUTSIDE WATERING USE

#### **Exceptions to Restrictions:**

- i. Hand irrigation of crops used for food by residents at a residential property shall not be restricted.
- ii. Water to sustain animal life shall not be restricted.
- iii. Commercial Pressure Washing businesses that are registered and in good standing with the State of NH as listed in the records on file with the NH Secretary of State shall not be restricted unless deemed necessary by either the MVD Board of Commissioners, the Superintendent, the Business Manager, or their designee(s).
- iv. Despite the authority granted by RSA 41:11-d. water use restrictions shall not apply to uses that obtain water from sources other than the public water supply, unless it can be clearly demonstrated that the use of such water directly affects the public water supply. Note: Municipalities or village districts have the authority to implement lawn watering restrictions in accordance with RSA 41:11-d applicable to all water users (including those using private wells) under state declared drought conditions.



### Visit MVD's online customer web portal for all-in-one access!

*View your bill, account history, make payments, and MORE...*Log into MyMVD to view/update your options for Paperless Biling, AutoPay, AND Communications. Visit <u>www.mvdwater.org</u> and click the VIVID logo.

### QUESTIONS REGARDING THIS CCR REPORT

If you have any questions regarding this report or would like additional information about the water system please contact MVD's Business Manager/Water Quality Specialist, Jill Lavoie by phone at 603-424-9241 x: 103, by emailing <u>jlavoie@mvdwater.org</u> or in-person at MVD office located at 2 Greens Pond Rd Merrimack NH, 03054. MVD's normal business hours are Monday - Friday, from 8:00 AM - 4:30 PM.

| Name:                                     | Phone/Website       |
|---|---------------------|
| US EPA                                    | www.epa.gov         |
| US EPA Safe Drinking Water Hotline        | <u>800-426-4791</u> |
| NHDES Drinking Water & Groundwater Bureau | <u>603-271-2513</u> |
| American Water Works Association          | www.awwa.org        |
| New England Water Works Association       | www.newwa.org       |
| NH Water Works Association                | www.nhwwa.org       |

### Additionally, you may contact any of the offices listed below for information.



### MERRIMACK VILLAGE DISTRICT

2 Greens Pond Rd Merrimack, NH 03054

Office Hours:

Monday – Friday 8:00 AM - 4:30 PM

Phone: <u>603-424-9241</u>

Email: <u>customerservice@mvdwater.org</u>

Website: <u>www.mvdwater.org</u>

Facebook: <u>www.facebook.com/MerrimackVillageDistrict</u>