



Pennichuck 2024 Consumer Confidence Report

Penacook-Boscawen EPA # 0251010

What is a Consumer Confidence Report?

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

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

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

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

What is the source of my drinking water?

Penacook-Boscawen Water Precinct obtains its water from three gravel packed wells. Well 1 and 3 operate in tandem. Well 1 located 1100 feet northeast of pump station and yields approximately 200 gallons per minute (gpm). Well 3 located 1400 feet north of pump station/Treatment Building and yields approximately 200 gpm. Well 2 is a standby source located 900 feet east of the pump station and yields 195 gpm. Treatment consists of sodium hydroxide to increase pH therefore reduce corrosion, zinc-orthophosphate to reduce corrosion, and sodium hypochlorite for disinfection. Average daily use was 300,000 gallons per day (gpd), in summer months between 350,000 to 370,000 gpd.

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

NHDES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment prepared as noted below.

| SourceName | Low | Medium | High | Date |
|--------------------|-----|--------|------|------------|
| Gravel Pack Well 1 | 7 | 1 | 3 | 08/04/2000 |
| Gravel Pack Well 2 | 7 | 1 | 3 | 08/04/2000 |
| Gravel Pack Well 3 | 8 | 1 | 3 | 09/30/2005 |

Note: Due to the time when the assessments were completed, some of the ratings might be different if updated to reflect current information. The complete Assessment Report is available for review. For more information, call **Matt Day** at 800-553-5191 or visit the [NHDES website](#).

How can I get involved?

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

Violations and Other Information: We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

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 cannot control the variety of materials used in your plumbing components. **When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking.** Do not use hot water for drinking and cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at [US EPA Basic Information about Lead in Drinking Water](#).

2023 Results

| | Dated | 90th Percentile | Action Level | MCLG | # of Sites Sampled | # Sites Above Action Level | Violation Yes/No | Typical Source of Contaminant |
|--------------|-----------|-----------------|--------------|------|--------------------|----------------------------|------------------|--|
| Lead (ppb) | 5/27/2021 | ND | 15 | 0 | 22 | 0 | No | Corrosion of household plumbing systems, erosion of natural deposits |
| Copper (ppm) | 5/27/2021 | 0.158 | 1.3 | 1.3 | 22 | 0 | No | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

DISINFECTION BY-PRODUCTS

| | Dated | Highest Detect | Range Detected | MCL | MCLG | Violation Yes/No | Typical Source of Contaminant |
|-----------------------------|--------------|----------------|----------------|----------|-----------|------------------|---|
| Chlorine (ppm) | Monthly 2023 | AVG 0.58 | 0.2-1.09 | 4 - MRDL | 4 - MRDLG | No | Water additive used to control microbes |
| Total Trihalomethanes (ppb) | 7/5/2023 | 7.9 | 2-7.9 | 80 | 0 | No | By-product of drinking water chlorination |

INORGANIC CONTAMINANTS

| | Dated | Highest Detect | Range Detected | MCL | MCLG | Violation Yes/No | Typical Source of Contaminant |
|---------------|----------|----------------|----------------|-----|------|------------------|---|
| Barium (ppm) | 7/6/2022 | 0.007 | 0.0042-0.007 | 2 | 2 | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (ppm) | 7/5/2023 | 0.37 | 0.28-0.37 | 10 | 10 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

Organic Chemical Contaminants

| | Dated | Highest Detect | Range Detected | MCL | MCLG | Violation Yes/No | Typical Source of Contaminant |
|--------------------------------------|-----------|----------------|----------------|-----|------|------------------|--|
| Perfluorohexanesulfonic acid (PFHxS) | 7/11/2023 | 0 | <2.00 | | 0 | No | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems |
| Perfluorononanoic acid (PFNA) | 7/11/2023 | 0 | <2.00 | 11 | 0 | No | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems |
| Perfluorooctanesulfonic acid (PFOS) | 7/11/2023 | 0 | <2.00 | 15 | 0 | No | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems |
| Perfluorooctanoic acid (PFOA) | 7/11/2023 | 0 | <2.00 | 12 | 0 | No | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems |

SECONDARY CONTAMINANTS

| | Dated | Level Detected | Treatment Technique | AL (Action Level), SMCL or AGQS | Typical Source of Contaminant |
|-----------------|----------|----------------|---------------------|---------------------------------|---|
| Chloride (ppm) | 7/6/2022 | 30 | N/A | 250 | Wastewater, road salt, water softeners, corrosion |
| Hardness (ppm) | 7/6/2022 | 26.8 | N/A | N/A | Geological |
| Iron (ppm) | 7/8/2021 | 0.111 | Phosphate | 0.3 | Geological |
| Manganese (ppm) | 7/8/2021 | 0.00406 | Phosphate | 0.05 | Geological |
| Nickel (ppm) | 7/6/2022 | 0.0018 | N/A | N/A | Geological; electroplating, battery production, ceramics |
| pH | 7/8/2021 | 6.08 | Sodium Hydroxide | 6.5-8.5 | Precipitation and geology |
| Sodium (ppm) | 7/6/2022 | 18.5 | N/A | 100-250 | Road salt, septic systems (salt from water softeners) We are required to regularly sample for sodium |
| Sulfate (ppm) | 7/6/2022 | 9 | N/A | 250 | Naturally occurring |
| Zinc (ppm) | 7/6/2022 | 0.0162 | N/A | 5 | Galvanized pipes |

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

Definitions:

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

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

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

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

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level 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.

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.

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

Abbreviations

NA: Not Applicable

ND: Not Detectable at testing limits

pCi/L: picoCurie per Liter

ppm: parts per million

ppb: parts per billion

ppt: parts per trillion

RAA: Running Annual Average

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

The most up to date information of **PFAS RESOURCES** can be found on the following NHDES websites:

NH PFAS Investigation

<https://www4.des.state.nh.us/nh-pfas-investigation/>

NH Department of Health and Human Services

<https://www.dhhs.nh.gov/dphs/pfcs/index.htm>



Office Hours: Monday - Thursday 7:30am - 7:00pm & Friday 7:30am - 5:00pm

Emergency contact 24/7

(800) 553-5191

www.pennichuck.com