

Mandatory Water Testing of Drinking Water Wells for Single-Family Residences: What Well owners Need to Know

For access to the online document with links and resources, visit:

<https://www.healthvermont.gov/environment/drinking-water/new-drilled-well-testing-what-you-need-know> or <https://dec.vermont.gov/water/programs/ww-systems/program-education>.

Why am I required to test my drinking water?

A law, that became effective in 2019, requires that all landowners of single-family residences who install a new groundwater source for drinking water (for example, a new drilled well, a new shallow well, a new driven well point, or a new spring), or who deepen an existing groundwater source, test the water before using it. The requirement is in the Department of Environmental Conservation (DEC) Wastewater System and Potable Water Supply Rules effective April 12, 2019 (Rules) available online at dec.vermont.gov/sites/dec/files/dwgwp/rorules/pdf/Wastewater-System-and-Potable-Water-Supply-Rules-April-12-2019.pdf. See § 1-1113, Water Quality, on page 194 of the Rules for the actual water testing requirements. Note that the Rules also identify other situations when a groundwater source of drinking water serving a single-family residence or other building must be tested.

If you have questions about whether you need to test your well or spring, please consult the designer or engineer you hired to design your well or spring or contact the Regional Office serving your area:

Essex Junction: 802-879-5656

Montpelier: 802-828-5034

Rutland: 802-289-0603

Saint Johnsbury: 802-751-0130

Springfield: 802-289-0603

It is also good for people to know what is in their drinking water. Some contaminants, such as arsenic and manganese, occur naturally in drinking water and most of them you cannot see, smell, or taste, and they can affect your health.

Who can sample the water?

Landowners can collect water samples. You can also ask the following people to collect the water sample for you: well drillers, the designer or engineer you hired to design your well or spring, hydrogeologists, certified water specialists, town health officers, master plumbers, or public water system certified operator. See § 1-1113(c)(1), page 194, of the Rules for the complete list of individuals who can take your water sample.

What am I required to test my water for?

The Rules require testing for *E. coli*, total coliform bacteria, arsenic, fluoride, lead, manganese, nitrate, nitrite, uranium, gross alpha, chloride, sodium, iron, odor, and pH.

There are specific circumstances in which DEC may also require you to test for other contaminants. Consult the designer or engineer you have hired to design your well or spring, or the DEC Regional Office serving your area, for information on whether you are required to test for other contaminants.

When and how do I collect a water sample?

See § 1-1113, page 194, of the Rules for the actual sampling requirements. The basic requirements include the well being disinfected with chlorine, flushed to remove the chlorine from the water, and then sampled using the cold-water faucet of the kitchen sink.

The laboratory you use to analyze the water sample will provide you with specific instructions on how to collect a water sample. For basic information on how to sample water, watch this video: youtu.be/roH10-X3J9M. Examples of instructions on how to collect water samples can be found at: healthvermont.gov/lab/forms. Most contaminants are sampled after what is called “flushing” the water tap, or running the water for a length of time. Because lead generally comes from plumbing rather than being naturally occurring in the groundwater source, lead sampling is required to be a “first draw” sample rather than a sample taken subsequent to flushing. Be sure to specify to the laboratory you use that the lead sample needs to be “first draw”; they will provide specific instructions for how to take such a sample.

What laboratory should I use for water testing?

You can use the Health Department Laboratory or any laboratory certified by the Health Department. A map with certified drinking water laboratories can be found at: healthvermont.gov/drinkingwaterlab.

If you choose to use the Health Department Laboratory and you have questions, you may contact the Laboratory at 802-338-4724 or 800-660-9997 (toll-free in Vermont only)

How much does it cost to test my water with the Health Department Laboratory?

The test kits from the Health Department Laboratory that cover the required testing currently cost \$161. To order drinking water test kits from the Health Department Laboratory, call 800-660-9997 or 802-338-4724 and ask for:

- **Kit A** (total coliform/*E. coli*)
- **Kit ID** (arsenic, chloride, fluoride, iron, manganese, nitrate, nitrite, sodium, uranium, pH and odor)
- **Kit RA** (gross alpha)
- **First Draw Lead**

If I use the Health Department Laboratory, when will I receive water test results?

The Health Department Laboratory completes its analysis of the samples between one and 21 days after the lab receives the samples. You will receive results by mail shortly after the analysis is complete.

Am I required to submit the test results to the State of Vermont? How?

Regardless of the laboratory you use, all results need to be sent to the Health Department. This is done automatically for you by the Health Department Laboratory and by a laboratory certified by the Health Department. If you need a DEC permit for your water supply, you may also need to submit your results to DEC. Consult your permit to determine if this is required.

How do I interpret my water testing results?

Information on how to interpret inorganic chemical test results from the Health Department Laboratory can be found at healthvermont.gov/public-health-laboratory/drinking-water-testing/metals-physicals-and-anions. Information on how to interpret test results about gross alpha results can be found at healthvermont.gov/water/radioactive-elements and on bacteria results can be found at healthvermont.gov/water/coliform-bacteria. Keep in mind, laboratory test results from different

laboratories don't look alike. If you have questions, please contact the Health Department Drinking Water Program at 802-863-7220 or (in Vermont only) 800-439-8550.

How do I treat my water if I have contaminants present?

You can find information about drinking water contaminants, health concerns, and treatment options at healthvermont.gov/water-contaminants. Each contaminant webpage includes links to water treatment specialists and certified well drillers who can provide information about treating your water. If you have questions, please contact the Health Department Drinking Water Program at 802-863-7220 or (in Vermont only) 800-439-8550.

If you cannot afford to install a treatment system, you can find information about financial assistance at dec.vermont.gov/facilities-engineering/water-financing/on-site-loan.

Am I required to treat my water if contaminants are found in my water?

The Rules do not require you to treat your groundwater source if it serves only a single-family residence (meaning the well or spring only connects to your single-family residence). However, treatment is recommended. If you rent out your house, you are required to treat the water according to the Health Department's Rental Housing Health Code (healthvermont.gov/sites/default/files/REG_Rental_Housing_Code.pdf).

How will the State of Vermont use my water test results?

The Health Department collects the water quality results and uses them to create maps to identify areas of concern in the State for water contaminants. Maps for certain drinking water contaminants, including arsenic, nitrate, uranium, gross alpha, radon (water) and fluoride can be found on the contaminant webpages accessed through healthvermont.gov/water-contaminants.

When should I do follow-up testing of my water?

The Rules only require testing of your water prior to use unless you have a permit requiring additional water testing. Your water can change over time. The Health Department recommends testing your water regularly (see the water testing recommendations at healthvermont.gov/water). If you recently constructed a new well or deepened your well and tested the water, consider retesting six to 12 months later because this test result may better represent your long-term water quality.

Am I required to test the water when I am selling my home?

The simple answer is no, but the owner is required to provide the potential buyer with the "Testing Drinking Water from Your Private Well" informational sheet on the benefits of testing drinking water available at healthvermont.gov/water. The Health Department suggest testing your water before putting your home up for sale. More information can be found at healthvermont.gov/water.