Testing Your Water

It is recommended that you use a state-certified lab for water testing. Call S.C. DHEC's Office of Lab Certification at ***(803) 896-0970*** for a current list of certified labs. You can also reach them by e-mail: ***labcerthelp@dhec.sc.gov.*** Call the lab directly for instructions in collecting and sending your samples to be analyzed for Radium 226 and Radium 228.

How can I remove radium from my water?

Several methods are available to remove radium from well water. Ion exchange and reverse osmosis units can be purchased for home use and require regular maintenance to keep them functioning properly. If you have high blood pressure, an ion exchange unit is not recommended since it produces salt during the treatment process. The National Sanitation Foundation International certifies certain treatment units for removing radium. See their Web site at ***www.nsf.org.***

Other Options

Bottled water may be used for drinking and cooking.

Radon in Water

Radon is a natural, radioactive gas that forms when uranium breaks down in soil, rock and water.

EPA has not set a limit for radon in drinking water. Radon in air is considered a larger health concern, and can enter the air in your home from the soil underneath it. S.C. DHEC recommends that you test your home for radon.

You can obtain a FREE radon test kit by calling the South Carolina Department of Health and Environmental Control's Radon Hotline at ***(800) 768-0362***.

For More Information:

S.C. DHEC Radium Web site:
www.dhec.sc.gov/environment/water/radium.htm

EPA Web site:
www.epa.gov/safewater/radionuclides/basicinformation.html

EPA Publication:
Drinking Water From Household Wells
www.epa.gov/safewater/privatewells/pdfs/household_wells.pdf

S.C. DHEC Radon Web site:
www.scdhec.gov/radon

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Radium and Drinking Water

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South Carolina Department of Health and Environmental Control

Radium in Well Water

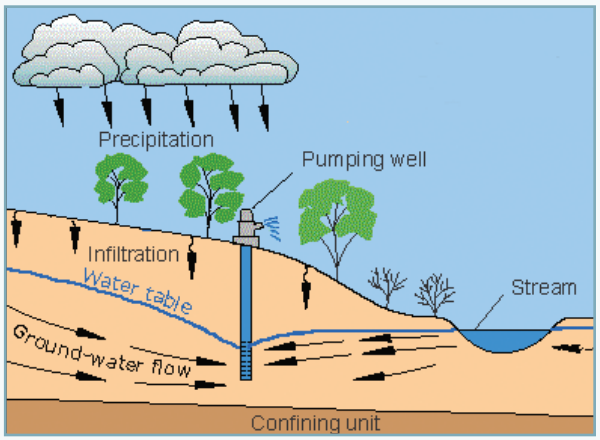
If you drink water from a residential well, you are responsible for testing your water and should do so regularly for bacteria as well as other contaminants. This brochure concerns radium in drinking water.

What is radium?

Radium is a radioactive substance that occurs naturally in certain rocks and soils. It is produced when other radioactive substances such as uranium and thorium break down over time. As this change occurs, radiation, which is a form of energy, is given off. Radium is commonly found in two forms, as Radium 226 and Radium 228.

Radium and Groundwater

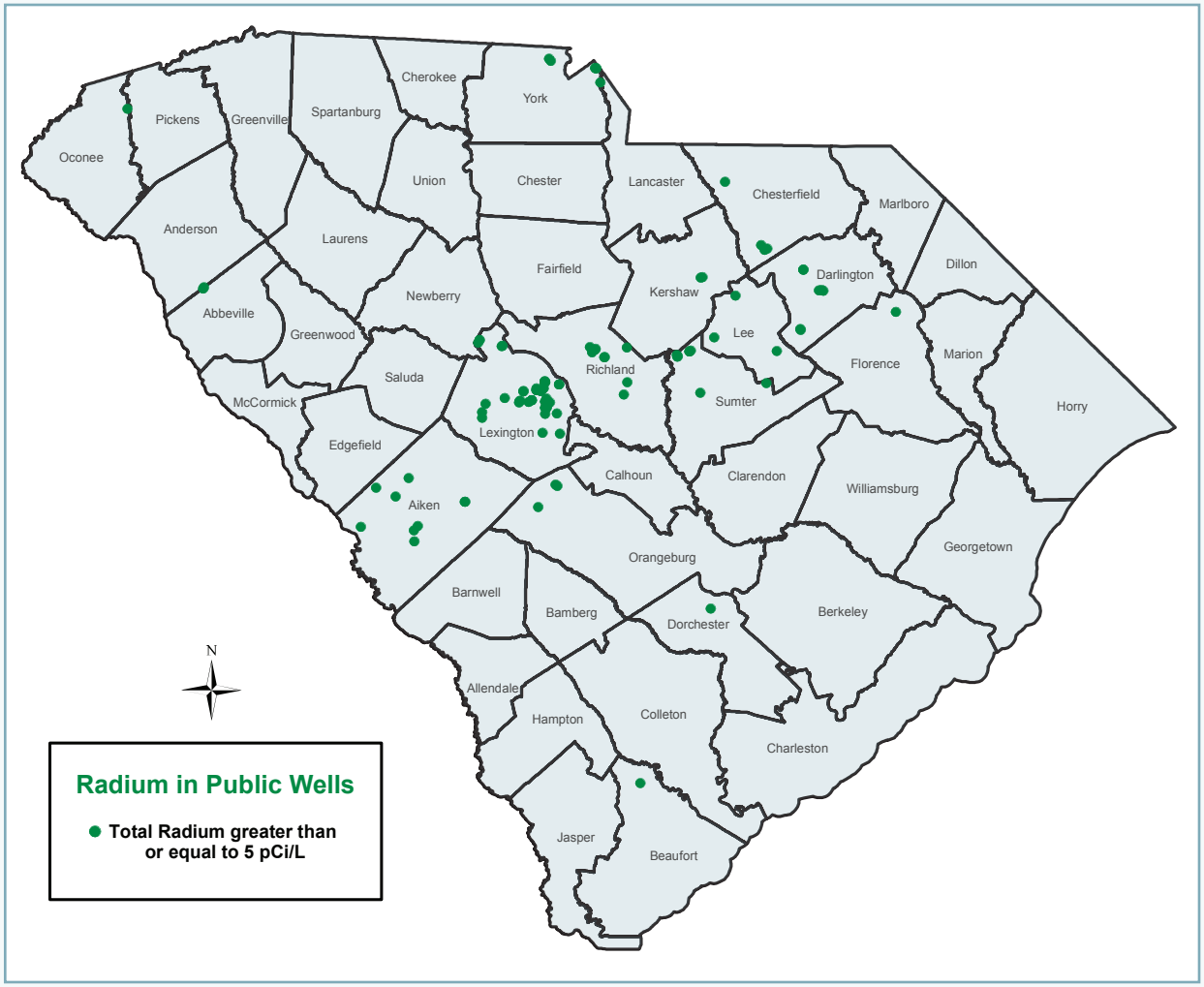
Groundwater moves very slowly, allowing substances in the rocks and soil around it to dissolve into the water over time. Radium has been found in the groundwater in several areas of South Carolina.



USGS

Is there a safe level of radium in water?

The United States Environmental Protection Agency (EPA) has set a limit of 5 picocuries per liter of water as the level that is protective of human health. This level is based on a lifetime of 70 years of drinking about two quarts of water per day.

Health Risks

Immediate health risks from drinking water with low levels of radium are small. Drinking water with radium over a lifetime increases a person's risk of developing certain types of cancer. Water with radium can be used for bathing, laundry and irrigation.