



Radon Inspection

What is Radon, and why is it dangerous?

Radon is a naturally occurring, colorless, odorless, tasteless gas that results when uranium breaks down in soil, rocks or groundwater. When radon is inhaled, radioactive particles can stick to lung tissues and cause tissue damage and lung cancer. Radon is the leading cause of lung cancer among non-smokers, and the second leading cause of lung cancer for the general population. For people who smoke and live in a house with high radon levels, the risk of lung cancer is particularly high.

Why does radon matter to homeowners?

We are constantly exposed to radon, both indoors and outdoors. The air pressure in your house is generally lower than the pressure in the ground. This can act like a vacuum, resulting in radon being drawn into your house from the ground through cracks in the foundation, crawlspaces or other openings.

Why is radon testing important in a PA real estate transaction?

Radon levels are measured in picocuries per liter of air, or pCi/L. The average level of radon present in outdoor air is about 0.4 pCi/L. The average radon level inside homes in the United States is about 1.3 pCi/L. The level at which the Environmental Protection Agency recommends that a house be “fixed” is 4.0 pCi/L.

Unfortunately, in Pennsylvania we tend to have unusually high radon levels in homes. In the entire US, it is estimated that approximately six percent of homes have radon levels above 4.0 pCi/L. The PA Department of Environmental Protections states that, “Pennsylvania has one of the most serious radon problems in the United States. Approximately 40 percent of Pennsylvania homes have radon levels above Environmental Protection Agency’s action guideline of 4.0 pCi/L.”

Because of this, it is vitally important that home buyers in Pennsylvania take the crucial step of including a radon test in all real estate transactions, to protect the health of their families.

How is a radon test conducted?

Real estate transaction radon tests are generally conducted for a period of at least 48 hours, using a device placed in the lowest level of the house used as living space, or the lowest level that could be used as living space in the future. Using this resulting radon level, recommendations can be made regarding the advisability of “fixing” the home. Radon remediation is a fairly simple process that can be conducted by a Pennsylvania DEP certified Radon Mitigation Specialist. With mitigation, radon levels in most homes can successfully be reduced to less than 2.0 pCi/L.

Pennsylvania law requires that anyone who performs radon testing, mitigation or laboratory analysis activities must be currently certified by the PA DEP. We are certified by the PA DEP as Radon Testing Specialists. We use only testing devices approved by the PA DEP, the National Radon Safety Board, and the National Radon Proficiency Program. Our testing process involves placing a continuous radon monitor (CRM) in the residence for a period of 48 hours. This CRM records the radon level present at hourly intervals during that period. The measurements are averaged to provide the radon level of the residence. Following the radon test, a detailed written report will be provided, along with recommendations based on the results.

It should be noted that, because of the length of the radon test, there are some extra requirements not usually relevant during a general home inspection. Beginning 12 hours prior to the test, and continuing for the entire period of the test, the residence must operate under “closed house conditions”. These conditions will obviously involve the participation of any current residents of the home. These conditions will be detailed in a form that is provided to the selling agent, for review and signing by the seller or occupant prior to the test. Failing to establish or maintain closed house conditions will result in an invalid test result.