

# Radon Monitoring

In early February 2006 three residents in Rarity Bay had their homes tested for radon. The results showed very high levels of this gas. As a result, and based on a great deal of information found on the internet, the RBHOO Board agreed to sponsor a radon information and testing program for all homeowners in our community. RBHOO purchased 3 electronic testers at a cost of \$350. A system was established to record those who wanted to test and keep track of the readings obtained. The hope was to find trends and make recommendations from the testing results. These testers continue to be available to any member who wishes to test or retest.

Radon is prevalent in East Tennessee. It is a colorless, odorless, tasteless gas that is produced by the natural breakdown of uranium in the soil. It is also alleged to be the second leading cause of lung cancer, after smoking, and the leading cause for those who have never smoked. While radon may be a problem, it can be mitigated with the installation of the proper equipment. This consists of piping and a ventilating fan which vacuums the gas from under the foundation of the home to the air above the eave line, in accordance with EPA standards. Thus, the gas coming into the home is minimized. The EPA has set the safe level for radon at 4 pico-Curies per liter. Anything above that is considered unsafe for long-term exposure.

During the RBHOO testing period, results were plotted on a map of the community. Frankly, no conclusions can be made as to the likelihood of safe or unsafe levels of radon in any geographic portion of the Rarity Bay peninsula. It appears that homes near the water and/or homes that required removal of rock for the foundation may be subject to elevated levels of radon, but that is not certain. If you are concerned about radon levels in your home, you should have it tested.

Most importantly, if you are building a new home, consult with your architect and/or builder about having a passive radon system installed during construction. This should automatically reduce the radon level in the home. If, later, you want additional protection, it is easy to install a fan.

Anyone wishing to test or retest, can borrow one of the RBHOO radon meters. While testing will continue, no additional aggregate statistics are being compiled.

As an alternative (or as a next step if the meter indicates a higher reading), the State of Tennessee Department of Environment and Conservation (TDEC) will do a free test once a year. Go to the state website ([https://tdec.tn.gov/Radon\\_Online/frmRADON\\_Online.aspx](https://tdec.tn.gov/Radon_Online/frmRADON_Online.aspx)), and complete and submit the application form. They will send you a test kit. Run the test, mail the kit back to the state, and they will email the results to you