

Additional Radon Information – August 11, 2011

For those of us interested in checking the Radon situation in our individual units/buildings, here is a site where the latest findings and recommendations can be seen (copy & paste to your browser):

<http://www.epa.gov/radon/healthrisks.html>

I've found a local expert who can sell you test kits of both main types (short term and one year long test kits). The short term ones sell for \$14.95 + tax. The year-long ones are \$25.95 + tax. The reading and reporting of the results are included in the prices.

His name is Shawn, his phone # is 684 0893. He's at 1936 Butler Bridge Rd. in Fletcher - just a short distance from here.

He is more than willing to answer any questions you may have, and to suggest the best ways you could check your unit for Radon. He also knows the best people to use if you decide you need Radon "mitigation," or to check the mitigation you may already have in place.

Hope this is helpful - Jim Parisi
Unit #: 602

RADON TEST RESULTS – 2 DAYS VS. 6.5 MONTHS

In June of 2007, the Fleetwood community was provided information about Radon Testing & Mitigation. That document remains on the Fleetwood Plaza website should you wish to review it again.

The thrust of the article, produced after gathering solid information from three recognized experts including a Duke Radiation Safety Officer (RSO) and two PhD's in the field of Radon and radiation, was that the 2 day radon test is **VERY UNRELIABLE**. The recommended approach was to undertake a minimum test of 91 days – but anything more up to one year is even better.

Some additional recommendations from Dr. Watson, a retired Health Physics professor at UNC were NOT to bring in Mitigation based on only one short term test. Such mitigation costs range from \$1,200 to \$1,500. At minimum, if a short term (2 day) test exceeds the upper limit of 4 PicoCuries/Liter, *do another short term test*, and better yet do a second but long term test. Lastly, he suggested owners would benefit by doing their long term test NOW so you know if you have a problem, do remediation if you so choose, and have the results when a buyer wants to see them (*the Board at that time had recommended all owners do this*).

The following bears out what the experts told us. I purchased a long term test canister (alpha tracker for ~\$23 + \$6 shipping = ~\$29) and hung it in my basement from June 15, 2007 to January 2, 2008 (~6.5 months). The test result came back at 4.0 pCi/L which is right at the upper threshold limit. Since this is not a living area, no remediation would likely be needed or appropriate.

I then purchased a short term test kit (~\$20 + \$7 shipping = ~\$27) and placed that in the same location for 50 hours. This is a vial using charcoal-silica adsorption material. The test result came back at 8.3 pCi/L – or more than double the long term test. Had only the short term test been done, remediation would have been most likely called for by the potential buyer at a cost to the seller of up to \$1,500 (or more – and if the work was satisfactory). Fleetwood has had one remediation that had to be redone due to unacceptable work (another ~\$1,200 +).

The above speaks for its self. Doing a long term test NOW in your unit will tell you if you have a problem, and if you do you can choose to remediate or not. Although there are no guidelines or requirements as to how long the long term test results are good for, Dr. Watson said that any emissions should not change significantly over time using the long term test. In any case you will have the results if and when a buyer wants radon test results and you can avoid the **VERY UNRELIABLE** short term 2 & 3 day tests that will surely cost you \$\$\$\$ if the result exceeds 4.0 pCi/L.

Should you wish to order your own radon test kit, you can go to www.accustarlabs.com and go to Radon Testing Products found at the bottom of the listings in the left margin. The Long Term Alpha Track Test Kit is for three months to one year and currently lists at \$28 (Model #AT100).

Ron Rosenberger, 2/14/08

RADON TESTING & MITIGATION INFORMATION

Most, if not all, of the Realtor Contract Forms now have Radon listed as one of the criteria that the buyer can request. There is much misinformation about Radon, particularly about the best testing methodology -- as well as its mitigation. A recent buyer wanted a short term radon test which turned out to be above the upper threshold limit. The seller engaged a Mitigation individual who did a very poor job and left us with a real problem. There is lucrative money in this field.

The Board felt it essential to get a handle on this radon issue and then educate our owners to the facts. Having had some management experience in this arena, I volunteered to gather information from experts in the Health Physics field. Health Physics is a discipline dealing with radiation and its safety – and radon is one of many radioactive materials. It is a tasteless, odorless gas formed by the disintegration of uranium and radium found especially (but not all) regions with granitic soils.

I got some local leads from my former colleagues at the Merck Research Labs. This led me to Ben Edwards, an RSO (Radiation Safety Officer) at Duke who provided good information. He put me in touch with Dr. James Watson, a retired Health Physics Professor at UNC. He is recognized as the very best expert in North Carolina having done much of the county by county monitoring of radon, leading to the radon map for the state. I also talked with Dr. Felix Fong from the NC Dept. of Environment & Natural Resources.

From these radon experts, here are some things you all should know:

1. There are NO EPA REGULATIONS, state or federal, for radon emission levels. The EPA has recommendations that some people are touting as regulation or a requirement.
2. You are NOT required by any law or regulation to do radon testing.
3. However, if the buyer wants one you probably will want to do one to get the sale.
4. If you do a radon test, here are some very important things you need to know:
 - a. The short term test (i.e., the two day test which most testers use, especially when a home sale is pending) is VERY UNRELIABLE. It typically costs \$100 to \$125/test. You can buy a do-it-yourself kit for ~ \$10 - \$15 (or even free).
 - b. The short term test is not the real world. All windows and doors are to be closed for 12 hours before the test and then kept closed for another 48 hours during the test.
 - c. IF the 48 hour test exceeds the upper limit of 4 MicroCuries/Liter, a second but LONG TERM test is highly recommended -- at minimum do another short term test.
 - d. Dr. Watson recommended against bringing in Mitigation based on only one short term test result. Mitigation costs in the range of \$1,200 to \$1,500.
 - e. Any mitigation installation requires approval of the Board's Bldg. Maint. Committee.
 - f. The minimum Long Term Radon Test is 91 days; anything more up to one year is better. You can purchase a long term test kit for ~ \$20 to \$30 and do your own test.
 - g. There are no guidelines or requirements as to how long the long term test results are good for. However, Dr. Watson said that any emissions should not change significantly over time (using the long term test).

- h. He suggests owners would benefit by doing their long term test NOW so you know if you have a problem, do remediation if you so choose, and have the results when a buyer wants to see them. *The Board recommends all owners do this.*
5. A good website starter is www.ncradon.org. On left side, scroll down to the last item -Radon Links; go to EPA Links and click on RADON PUBLICATIONS; then scroll down to the first publication "A Citizens Guide to Radon". Follow other links and other websites to learn more. Also, use Google by entering "Radon Test Kits" -- and similar search words.

For the Board, Ron Rosenberger 6/15/07