UW Superior has received a grant to screen for radon in selected buildings on campus. The radon testing in this project is scheduled to start in mid-March and will be completed by mid-June. The testing will not interfere with any activities in the building. After all results are received and compiled, a final summary report will be prepared and made available to the campus community.

This FAQ is intended to address many of the common questions expected with this project.

What is radon? Where does it come from?

Radon is a radioactive colorless, odorless and tasteless gas that results from the decay of natural deposits of uranium and radium in soils. The amount of radon gas will vary with the soil conditions found in the area. The gas migrates from the soils to the air, and may collect inside structures where they are in contact with the soils, such as basements. The amount of radon that will collect in a building is affected by many factors, such as soil moisture and porosity, weather conditions, and how a building is constructed or ventilated.

As radon gas decays, it emits radioactive particles that can be inhaled and trapped in the lungs, where it becomes a risk factor for developing lung cancer. The concentration of radon gas in air is expressed as picocuries of radon per liter of air (pCi/L). The Environmental Protection Agency (EPA) has established an action level for radon of 4 pCi/L in occupied homes and commercial buildings. An ‘action level’ is the concentration that should trigger additional protective steps, such as additional air monitoring.

More information about the radon and its health effects can be found at:
Environmental Protection Agency: [http://www.epa.gov/radon/index.html](http://www.epa.gov/radon/index.html)

What does pCi/L mean?

The unit of measurement for radon is the number of picocuries (pCi) of radon gas per liter (L) of air. A curie (Ci) is a unit of radioactivity measurement. A picocurie is 0.000000000001 curies, or 1 X 10^-12 curies.

Is radon a problem in UW Superior buildings?

UW Superior does not suspect that radon levels in our buildings will exceed acceptable levels, but sampling is the best way to be sure. Three previous single-sample screenings in in 2005 found less than detectable levels of radon (less than 0.3 pCi/L) in Ross, Hawkes and Sundquist Hall basements.
Data available from the Wisconsin Department of Health Services and the Environmental Protection Agency (see links below), suggests that northern Wisconsin has a low to moderate risk of radon in homes and large buildings, however small localized areas of higher concentrations can be found anywhere. Soil conditions and building structural features make it hard to predict which buildings will have elevated levels of radon, so testing is the best method to assess potential radon exposure.

UW Superior has received a grant to screen for radon in selected campus buildings during March - June 2014. This project will allow UW Superior to collect a greater number of samples in each building to provide a better representation of existing conditions.

At the conclusion of the project, UW Superior will share a summary of the radon results with our students, employees and local public health agencies. Decisions for future screenings in other buildings will be considered after a review of the initial screening results.

**How will radon be measured?**

The radon testing in this project will use a screening method, in which short-term samples are collected in basement areas of selected buildings. A small collection vial containing an absorbent material will be attached to a wall or column in the room. If radon gas is present, it will diffuse onto the absorbent and be trapped.

The total time for the testing is about 60 hours. The evening before testing will begin, 12 hours of normal “closed” building conditions are needed in which exterior doors and windows are kept closed except for normal entering and exiting of the building. The following morning, the collection vial will be placed in the room and opened to the air. After 48 hours of exposure to the air, the vial will be capped and sent to the laboratory for analyses. UW Superior will receive a lab report with results within a couple of weeks. After all results are tabulated, a summary of results will be shared with the campus.

Email messages will be sent to the building occupants a few days before the testing in the building will begin. A “Do Not Disturb” sign will be posted at the sample location. Please do not tamper with the sample, as it will affect the results. If you have questions, please contact the Environmental Health and Safety Office.
**What buildings will be surveyed?**

UW Superior will be collecting samples in campus buildings where basement areas are frequently occupied, such as living areas, classrooms, meeting or office spaces. The buildings will include:

- All residential buildings (Crownhart, Curran-McNeill, Ostrander, Ross and Hawkes Halls)
- Holden Fine Arts
- Barstow Hall
- Erlanson Hall
- Yellowjacket Union
- Jim Dan Hill Library

Email messages will be sent to the building occupants a few days before the testing will begin. The testing process will last about 60 hours. A “Do Not Disturb” sign will be posted at the sample location.

**What are the concern levels for radon gas?**

The Environmental Protection Agency indicates that the average radon levels are estimated as 1.3 pCi/L in indoor air, and 0.4 pCi/L in outdoor air. (EPA *Citizens Guide to Radon*, [http://www.epa.gov/radon/pubs/citguide.html#results](http://www.epa.gov/radon/pubs/citguide.html#results)). Three single-sample screenings in Ross, Hawkes and Sundquist Hall basements in 2005 were found to have less than detectable levels of radon in air (less than 0.3 pCi/L).

If the results of the short term screening exceed the EPA’s 4 pCi/L action level, the next steps would be to do additional testing to confirm radon levels. An ‘action level’ is the concentration that should trigger additional protective steps, such as additional air monitoring or remediation. If additional testing confirms elevated levels, then seeking the assistance of radon professionals would be recommended to see what measures can be done to reduce the presence of radon in the air. Usually the corrective measures are low cost and very effective.

**Should I test my home for radon?**

The local Health and Human Service offices in Wisconsin and Minnesota can help you determine if you should test your home for radon and how to collect a sample. The local contact information is:

- Douglas County Health and Human Services, Superior, WI (715) 395-1304
- St. Louis County Public Health and Human Services, MN (218) 125-5210
Who do I contact if I have questions about radon testing at UW Superior?

Please contact the Environmental Health and Safety Office if you have any questions or concerns about the radon testing at UW Superior.
   Email: clindber@uwsuper.edu   Phone: 715-394-8073

Where can I get more information about radon?

The following web sites will provide more detailed information about radon risks, how to sample for radon, and remediation strategies:

Wisconsin Dept. of Health Services: http://www.dhs.wisconsin.gov/radiation/radon/
Environmental Protection Agency – Radon http://www.epa.gov/radon/index.html