Radon Today™

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In This Issue:

Higher Standards

In 1776 in a letter to her husband, Abigail Adams wrote, "Remember all men would be tyrants if they could. If particular care and attention is not paid to the ladies, we are determined to foment rebellion, and will not hold ourselves bound by any laws in which we have no voice or representation." Over the years this became shortened to, and quoted as, "Remember the ladies." To the American Society of Radon Scientists and Technologists (AARST) we say, "Remember the radon."

The EPA's guidelines and standards for radon have not been added to or revised since 1995. While there have been a number of organizations which have tried to fill the void left by the EPA, the results have been mixed at best and confusing and self-serving at worst.

Gary Hodgden, the Chairman of the AARST Standards Stakeholders Committee said, "AARST is taking on this project because it is uniquely qualified to do so. AARST represents the entire radon community; there is no hidden agenda and no conflict of interest. This insures qualified contributors during the process."

How does the process work? All AARST members have access to the progress of working groups by logging on the AARST site. This will allow them to review all the documents and comment on every phase of it. The work groups are comprised of various members of the radon industry and do not need to be AARST members.

AARST has already made much progress. Its first interim document, "Protocol for Conducting Meaurements in Multi-family Buildings" was finished in October 2004. AARST then has three years from that date to accumulate comments, make revisions and then approve a final version. Six other documents are in the works. The "Homes Measurement Protocols" and "Radon Mitigation Standards" were released in June for public review.

It is very important that the radon industry be on the same page and that the guidance and protocols being used are of the very highest standards. For this reason Radon Today encourages AARST members to get involved and encourages those radon professionals who don't belong to AARST to become members.

For those radon professional who don't know what AARST is all about, the organizaton was formed in order to, "Bring together the knowledge and research of scientists in the laboratory with the applied skills and experience of professionals in the field…." For more information about AARST please go to its web site www.aarst.org or call (866) 772-2778.

The address is:

American Association of Radon
Scientists and Technologists
2502 South Fifth Avenue
Lebanon, PA 17046

To see a comment form for a public review draft and to view the draft you may visit the following web sites:

www.radonaway.com or www.accustarlabs.com.

Radon Today would like to thank T.E. Lavoie for checking historical quotes for accuracy.

Duck and Cover

In 1979 America suffered a horrific nuclear power plant accident at Three Mile Island (TMI) in Pennsylvania. Some of us watched the event on television from the safety of a state far away. Dr. R. William Field, however, was a mere four miles away. His wife was doing her residency at Hershey Medical Center (about six miles from TMI) and she would not leave her patients. This then became the subject of his first publication (and his wife's), "Iodine-131 in thyroids of the meadow vole (Microtus pennsylvanicus) in the vicinity of the Three Mile Island nuclear generating plant." Thus began his career in radiation dose assessment.

Dr. Field is an associate professor of occupational and environmental health and epidemiology at the University of Iowa College of Public Health. His research and published studies on radon and radiation exposure are legend.

There were, and continue to be, health concerns following the Three Mile Island accident. And although there have been several studies that "explore whether or not TMI accidental plant radiation releases caused an increase in lung cancer in the community around TMI", it is Dr. Field's contention that, "the major source of radiation exposure to the population has been ignored…" He has recently released a paper titled, "Three Mile Island Epidemiologic Radiation Dose Assessment Revisted: 25 Years After The Accident."

In his introduction Dr. Field writes, "Environmental epidemiologic studies are frequently performed in emotionally charged situations in which the public is anxious, angry, fearful or distrustful…" He further explains that, "Radon has no sensory reminders to repetitively stimulate us to think about it. It is not a dread hazard. Lung cancer caused by radon progeny exposure is not distinguishable histologically from lung cancer due to other causes. The preponderance of exposure to radon decay products occurs indoors at home and at work and is generally not caused by any industry, so there are no 'villains' to blame for its presence. These factors and others reduce the risk perceived by the public and, in turn, researchers and other scientists are not publicly reminded by social outrage to include it as part of radiation risk assessment."

The point being that past studies have ignored naturally occuring radon gas exposure in the area around TMI. As Dr. Field asked in a recent e-mail, "Isn't it odd that the highest regional radon concentrations in the nation are the counties around TMI?" In his study he wrote, "…it is impossible to predict how the radon concentrations in this area affect risk estimates without a more detailed survey involving residential radon."

He concludes with, "Even though there is little outrage or anger regarding radon exposure around TMI, radon progeny exposure should be included as part of the overall dose assessment in studies of radiation-induced lung cancer from the TMI accident, especially since radon progeny exposure in the TMI area produces much higher radiation doses to the lung than the officially reported offsite TMI accident-related releases."

Radon Today would like to thank, Dr. Field, so much for his time and for sharing his personal interest in this area of the country. Thank you also Dr. Field for keeping radon in the public mind.

Permission to quote from Dr. Field's article granted by Oxford University Press; thank you Michael Gibbons for speeding up the process.

I'd Like to Thank…

All achievement awards have to start somewhere. When the Academy of Motion Picture Arts and Sciences decided to recognize people in the movie industry with an award, they couldn't even decide what to call it. It was Bette Davis who dubbed the statue "Oscar" and so began an enduring annual event.

Well this year on June 26th, the EPA and the National Environmental Health Association (NEHA) will create another award which we hope also becomes an annual event. This is called the Individual Achievement Award for Excellence in Radon Reduction and this year's winner is (envelope please) Dr. R. William Field.

Dr. Field is an associate professor of occupational and environmental health and epidemiology at the University of Iowa College of Public Health. The award will be presented at the NEHA annual education conference in Providence, Rhode Island. The award specifically recognizes Dr. Field's "individual and program achievements for designing and implementing effective radon risk reduction outreach programs".

Dr. Field's expertise and research interests literally run for nine pages! Not only does he do research, he has published numerous studies on radon and radiation exposure. And as if this were not enough, he is also on the World Health Organization (WHO) Expert Committee of Radon. His role for WHO includes serving as the Radon Project Committee Chair –Working group on radon measurement and mitigation and also a committee member –Working group on world burden of radon related lung cancer. He also does consulting to Public Health Agencies, the Department of Defense and the State Department.

On a personal note we here at *Radon Today* want to thank Dr. Field for always taking time out of his busy day to answer our questions. Congratulations on your award; you've earned it.

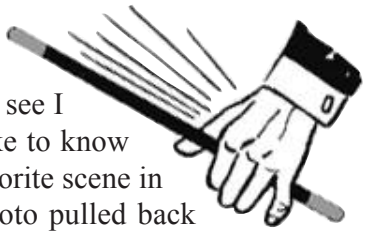
Just Looking

The technological equivalent of window shopping is web site browsing. Might we suggest that the next time you find yourself in front of your computer you should check out two interesting web sites.

The first is **www.radonaway.com** and the other is **www.accustarlabs.com**. Wander around.

Take your time.

Nothing Up My Sleeve



As I was sorting through mail the other day I thought about magic tricks. You see I am one of those people who like to know how the tricks are done. My favorite scene in The Wizard of Oz was when Toto pulled back the curtain to reveal not a real wizard, but rather just an ordinary little man manipulating some controls.

Like Toto I'd like to pull back the curtain for you to reveal ordinary little men manipulating radon fan controls.

There is a reason that the words 'magic' and 'trick' are found together. For instance, one piece of mail I saw from a radon fan company showed a picture of three fans labeled A, B and C. The magic of fan B is the fact that it's so white and pretty like a bride on her wedding day. The behind the curtain trick however is that fan B is brand spanking new, while fans A and C have been out in the elements for god knows how long. Of course they're still running!

And isn't it magical to be able to say things like, "Best warranty in the business" and "We've been at this for five whole years"? The trick is in honoring warranties, having outstanding customer service and in having a real history in the radon industry.

So here's a real fact to ponder: After 15 years, nearly 90% of all radon fans made by RadonAway are still running. Magic? No. Just really hard work and a commitment to excellence in the radon industry.

The Editor

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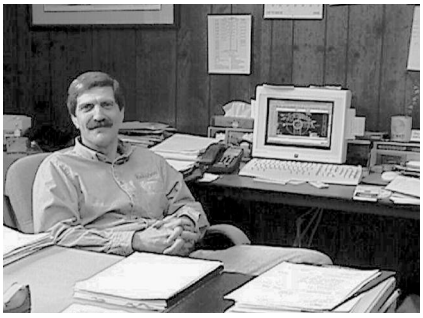
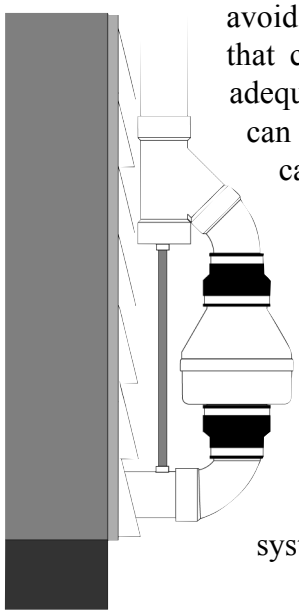


Dave's Corner

Condensation III

We saw in the previous two issues that the air inside an Active Subslab Depressurization System is relatively warm and wet. The moisture in this air can condense in the piping system if exposed to cold temperatures that chill the air past its dew point. A properly designed system accommodates this moisture to avoid problems with the operation and service life of the system.

In general, condensation in the piping system is dealt with by providing a path to drain back any water in the system to a suction point so that the water can then dissipate into the soil. Care must be taken in the design to avoid creating a water trap in the piping. Also, the pipe must have adequate pitch to ensure that condensation in the pipe will follow gravity downward. If the pipe does not have adequate pitch, water can be suspended in the pipe by friction with the air. Suspended water can cause gurgling noises as well as launch drops of water into the air-stream that can cause water to accumulate inside the fan unit.



A condensate bypass is essential to protect the fan unit from too much condensation. Water produced in the piping above the fan is the number one cause of fan failure. You can construct your own condensate bypass with fittings and tubing, as shown, or there are commercially available bypass kits available (see 2005 RadonAway Catalog page 13).

Prevent callbacks, increase customer satisfaction and increase profits by ensuring your systems are properly designed to handle condensation and always install a condensation bypass on outdoor systems to minimize system failures.

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