INDOOR ENVIRONMENTS ASSOCIATION

JUNE 2024

THE RADON REPORTER

Practical Information for Your Success

Wisconsin's VI Parternships | PFE Testing
33 Years of Florida Rn Data | Orlando Symposium

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TABLE of CONTENTS

AD INDEX

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Indoor Environments Association™ is a nonprofit, professional organization of members who are dedicated to the highest standard of excellence and ethical performance of hazard identification and abatement of radon, chemical vapor intrusion, and other contaminants of concern in the built environment. The organization primarily strives to advance the interests of its members through developing industry standards, certifying technical proficiency, enabling advancement of public policy, and communicating health risks to the public.

Letter from the Executive Director Diane Swecker

The Importance of Networking for Small Businesses: Building Relationships for Success

In today's competitive business landscape, networking has become an essential tool for small businesses to thrive and succeed. As the Executive Director of our Association focusing on radon and a newer focus on vapor intrusion, I am acutely aware of the pivotal role that networking plays in the growth and prosperity of our members. In this article, I will delve into the significance of networking within the radon industry, provide practical tips for effective networking, and highlight how it can benefit small businesses within our association.

Networking serves as a cornerstone for establishing and nurturing relationships within the radon industry. By connecting with professionals, experts, and potential clients, small businesses can gain valuable insights, access new opportunities, and stay abreast of industry trends. Whether it's attending industry events, joining professional organizations, or engaging in online forums, networking provides a platform for collaboration, knowledge-sharing, and mutual support.

Effective networking requires a strategic approach and genuine engagement. Small businesses should aim to build authentic relationships based on trust, reciprocity, and mutual respect. It's essential to listen actively, ask thoughtful questions, and offer assistance or resources where possible. By demonstrating genuine interest and adding value to interactions, businesses can forge meaningful connections that can lead to long-term partnerships and opportunities.

For small businesses within our association, networking offers a myriad of benefits that directly contribute to their growth and success. By expanding their professional network, businesses can access new markets, attract potential customers, and form strategic alliances with other industry players. Networking also provides a platform for showcasing expertise, sharing success stories, and enhancing brand visibility, which can lead to increased credibility and recognition within the radon community.

IEA National and chapters continue to create and support opportunities for networking through regional events, conferences, EPA Radon Stakeholder meetings and online platforms. Additionally, IEA provides resources, guidance, and mentorship to help our members navigate the networking landscape effectively.

In conclusion, networking is a powerful tool for small businesses in the radon industry to build relationships, seize opportunities, and achieve success. By embracing networking as an integral part of their business strategy, our members can unlock new possibilities, strengthen their presence in the industry, and contribute to the overall growth and prosperity of our association.

Together, let's harness the power of networking to propel our businesses forward and shape a thriving radon industry for years to come.

Board Retreat

The Indoor Environments Association board retreat was held at the Maritime Conference Center, Linthicum, MD, March 20 through 22. Most Board members attended in person with others joining remotely. This annual retreat aims to foster time for strategic planning, association updates, and collaboration among board members.

The retreat began with a warm welcome and an overview of the objectives for a collaborative, productive time over 2.5 days. Discussions commenced with a review of the organization's accomplishments in 2023, providing context for subsequent deliberations. A report on the progress of the rebranding effort highlighted the association's continued priority focus on radon while more fully integrating work on vapor intrusion and providing for future attention on other contaminants of concern.

Significant effort was dedicated to conducting a SWOT analysis. This analysis involved a thorough examination of the organization's strengths, weaknesses, opportunities, and threats, serving as a critical component of strategic planning. The results of the SWOT analysis were reviewed alongside an assessment of the strategic plan's progress to date. This session yielded valuable insights into the organization's present standing and its trajectory for future development. Productive discussion also centered on the future direction of the certifications program and symposia, highlighting the organization's commitment to advancing certified professionals and members.

Another important focus was the Association's government affairs work. Updates were provided on state and federal policies impacting the organization. Discussions emphasized the regulatory landscape's influence on its operations, with particular attention given to advocacy and political action nationally. IEA has strong leadership and advocacy helping with many regional initiatives.

Some board members involved in the Vapor Intrusion Stakeholder team addressed the approach to emerging issues and effectively incorporating these issues into the work.

The final day was dedicated to crucial decisions and concluding discussions. The board focused on finalizing the 2024 Strategic Plan, ensuring alignment with overarching goals. Ethics within the membership and certification compliance were emphasized, underscoring the organization's commitment to integrity. Renewing members will be offered the opportunity to support the PAC, American Radon Policy Campaign and the Foundation.

A business meeting addressed administrative matters, ensuring smooth operations and new initiatives. The retreat concluded with a wrap-up session, reflecting on discussions and decisions made, reaffirming priorities, and setting the tone for continued collaboration and progress.

The Retreat provided dedicated time for productive planning, healthy discussions and critical decisions being made for the future of the association.

Call for Nominations: Indoor Environment Association Awards

IEA invites nominations for six Association Awards that recognize Radon and Community Leaders who advance the profession. Please consider supporting your colleagues, employees, and community members by making them candidates for an award. Submit Nominations Here. Deadline is June 30, 2024.

2024 Awards

1. Jack Bartholomew Award (est. 2014) – for recognized excellence in the field of professional radon education.
2. Governance Award (est. 2006) – for significant leadership contributing to the Association's governance.
3. Elizabeth Hoffman Award (est. 2014) – for advocacy by a citizen-advocate contributing to risk reduction awareness and/or radon policy.
4. Radon Community Impact Award – to recognize an industry partner (e.g., real estate agent/ broker, builder, home inspector, state radon program official, public housing authority, journalist, etc.), who advocated for radon awareness in their community. (Standing Annual Award)
5. Radon Community Policy Award – to recognize an individual (e.g., federal, state, or local policymaker) who has an impact on radon policies in our country.
6. Chapter Leadership Award – to recognize an individual leader or the entire Chapter. (Standing Annual Award)

Notice: 2024 Indoor Environments Association Board Election

The Indoor Environments Association election process begins with the Nominating Committee's call this month for nominations to be submitted no later than June 1. The election will be conducted during September. The results will be announced at the Annual Meeting on Tuesday September 17 in Orlando, Florida. Positions open for election are National Elected Directors (five) and Vice-President.

Path to be a Nationally Elected Indoor Environments Association Board Member

Those eligible to run for the Nationally Elected Board, need to be members in good standing of the Association. Officers and Nationally Elected Directors shall be elected by the membership of the Association by a secure, independent internet balloting service. For the Officer position, the winner shall be the candidate for that office receiving the largest number of votes. For the positions of Nationally Elected Directors, winners shall be those having the largest number of votes among the candidates, as shall be enough to fill the number of open seats for said Directors. The results of the election shall be tabulated 24 hours prior to the Annual Meeting and announced at the Annual Meeting of the Association. In the event of a tie, the sitting Board will cast a tie breaking vote consisting of a quorum of the Board.

Board Terms

As per the bylaws 5.06 regarding Terms of Officers, Officers serve for a term of two years or until their successors are elected. A President-elect shall be elected every other year for a one-year term and afterward shall serve as President for two years. The outgoing President shall become the Immediate Past President, and shall serve as an Officer, for a term of one year. Except for the President, President-elect and Immediate Past President, an Officer may serve a maximum of three consecutive terms plus the unexpired term of a previous Officer.

How to Apply?

Those interested please contact nominations@aarst.org to receive an Indoor Environments Association Board Member Nominating Profile submission form, or access the form online. Please submit the completed form no later than June 1.

New IEA Brand and Logo Use Guidance

As part of the recent rebranding process, Indoor Environments Association is pleased to share the NEW and improved brand membership logo with all current members.

IEA leadership thanks members for immediately taking steps to discontinue the display of old logos for AARST-NRPP or AARST in professional and business email signatures, websites, social media, and other communications and start using the IEA logo. This action will help reduce confusion and inconsistency.

Current members should review the Use of IEA Brand and Logo agreement located in their Member Dashboard. It is necessary to consent to this agreement when downloading the logos.

Why Does Using the Correct Logo Matter?

Brand Definition is a distinctive mark, symbol and/or phrase, known as a tagline, which identifies a product or service as belonging to an organization, manufacturer, another type of corporation, or person. The IEA brand and logo carry significant meaning and value to those in the industry. Brand protection is key to preserving the intellectual property of the American Association of Radon Scientists and Technologists (AARST) / Indoor Environments Association (IEA).

Intellectual property includes:

- IEA brand and logos
- Company and domain name(s)
- Registered trademarks/service marks
- All copyrighted material, including web content, documents and videos

The IEA brand communicates our identity and the exceptional quality, value and service provided to those in the industry. Thus, IEA must protect, preserve, and defend our brand to ensure that they continue to be recognized symbols of quality. The IEA Brand, Logo and Mark are the property of AARST and their use shall only be authorized by the criteria presented in this policy.

Improper References to IEA Brands

IEA depends on the integrity of the members of its extended community to respect the limits IEA has placed on the use of its brands and logos.

Examples of nonconforming (and commonly misused) terminology may include, but are not limited to, the terms in the left column of the table below.

Do NOT use:	Reason:
AARST or IEA Accredited Professional AARST or IEA Certified Professional AARST-NRPP Certified Professional	• Individuals are certified by NRPP, not AARST or IEA • IEA is the professional trade association of members
AARST or IEA Certified Contractor / Business AARST or IEA Accredited Contractor / Business AARST-NRPP Certified/Approved/Accredited Business	• Individuals are certified NRPP • Contracting companies, businesses, and organizations that employ certified individuals are not certified or accredited
AARST or IEA Approved Trainer	• Neither IEA nor NRPP engage in training or certify, accredit, or approve trainers • NRPP approves training courses only
AARST or IEA Approved Device	• Devices that were on the EPA list are on the NRPP list of radon measurement devices • Devices not on the NRPP list must be submitted to NRPP for evaluation before it is NRPP-approved

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Radon Advocacy Day – Kentucky

Seventeen radon advocates and professionals met with more than 20 Kentucky lawmakers for Radon Advocacy Day on January 23rd. For the first time, Kentucky Radon Advocacy Day was held as a stand-alone event focused on radon-related advocacy. Strategically during National Radon Action Month, with this event, the Kentucky Chapter kick-started the year and revived efforts to unite in the fight for radon issues for the benefit of members, consumers, and ultimately public health.

Right out of the gate, members of the organization mingled with members of the General Assembly. A legislative breakfast was held in a cozy room in the Capitol Annex building. A few dozen lawmakers attended the buffet-style meal. Posters with concepts, charts and data aided conversations.

Representative Robert Duvall (R-Bowling Green) and Representative Kimberly Moser (R-Kenton) spoke to the group. Rep. Moser is a retired nurse and lung health ally. Rep. Duvall credits radon PSAs for saving his family's life. He told a story about discovering dangerous levels in his family's house and shared more about his wife's battle with non-Hodgkins Lymphoma. Rep. Duvall represents Bowling Green, the district where Mammoth Cave National Park is located. Shannon Baker, American Lung Association Advocacy Director for Kentucky and Tennessee, also joined the group and offered advice for speaking to lawmakers.

Speakers share

- Relate to your lawmaker. Tell a story that speaks to the issues.
- Be prepared to share relevant data.
- Follow up with the lawmaker. Include the topic or reference comments from the conversation.

Armed with IEA's Kentucky State Radon Report Card and a general policy brief, advocates deployed to their district representatives' offices for individual constituent meetings. Participants reported interactions were overall pleasant. Plans to continue building relationships with representatives across the commonwealth are underway.

The event brought to Frankfurt IEA members from nearly a dozen different cities with some members traveling more than 70 miles each way. It took weeks of planning and hours of preparing for minutes with lawmakers, and made a lasting impression that can have an impact beyond this legislative session.

Missouri Day at the Capitol

Leaders from the Heartland Chapter, American Lung Association, Lung Cancer Connection, IEA National, and other lung health advocates participated in a successful Day at the Capitol on January 30 in Jefferson City MO to build support for Regulation through Certification (RtC) legislation. HB2451 was introduced in order to ensure public health and safety and provide consumer protections when hiring radon measurement or mitigation specialists. The IEA Heartland chapter was represented by Cherie Summa, Jim Medley, Wes Hodgden, and Will Frost. More than 30 scheduled meetings and impromptu discussions occurred.

EPA Region 7 / Heartland Meeting

The EPA Region 7 / Heartland Chapter meeting occurred on March 12, in Independence, Missouri. Presentations included Chad Robinson on "Hunting the Source: Technology for Radon Tracking," Jim Medley addressing "Case Studies of Difficult Mitigations," and Laura Turner (American Lung Association) regarding MO House Bill 2451 which would regulate measurement and mitigation work in MO. This meeting also featured speakers from EPA, the State radon programs in IA KS MO and NE as well as CRCPD and IEA National.

Illinois Capitol Visits - March 2024

The Midwest IEA Radon Taskforce has advanced two identical bills - SB 3645 and HB 5226 - in the Illinois General Assembly. Both would require that school districts get all schools tested for radioactive radon (and mitigate if high levels are found). More than 40% of buildings in Illinois still have dangerous levels of radon.

Above left: Dan Potter, Senator Laura Ellman, Gloria Linnertz; Above right: Glorida Linnertz, Senator David Koehler, Dan Potter

Midwest Radon Stakeholder Conference

The Midwest IEA Chapter conducted its annual training day on March 15. Chapter Vice President, Dan Potter, emceed the conference with approximately 180 attendees. The group conducted legislator outreach to promote the school radon bill that is currently in the Illinois General Assembly. Over 600 calls were made to legislators!

Chapter Leadership Above L-R: Kirsten Schmidt (T), Dan Potter (VP), Jim Emanual (P), Aaron Morris (S)

The EPA Tri-Regional Meeting

The EPA Tri-Regional Meeting consisted of EPA Regions 8, 9 and 10, and occurred on April 23-24, in Reno, Nevada. In the keynote presentation, Dr. Chivonne Harrigal, MD, a board-certified radiologist who specializes in cancer imaging, discussed the importance of screening by Dr. Eric Whitsel, Professor of Epidemiology and Adjunct Professor of Medicine at the University of North Carolina - Chapel Hill spoke about associations for post-menopausal women between radon exposure and risk of stroke as well as risk of acquired mutations predictive of stroke.

Radon – I Didn't Know

Kerri Robbins

When Kerri Robbins, of Lehi Utah, took to the stage at the Indoor Environments 2023 in Nashville this past November, it was to share her story with the State and Tribal Radon Program leaders. during the presentation about Utah Department of Environmental Quality's outreach campaign by Eleanor Divver. The state's awareness plan spelled out where they focused messaging about testing. The demonstrated results showed how media (news and socials) aided in the goal.

IEA caught up with Kerri this month to talk to her more about her story.

Kerri's story began one morning (June 3rd, 2022) while working out on her treadmill, with a shocking and strange health episode that took her to the ER. Assuming she had had a ministroke, they did a brain MRI along with numerous other tests. Three hours later she was discharged with a probable ministroke and instructions to see a neurosurgeon because they had found the possibility of a brain tumor on the MRI. It took two months to be seen by her neurosurgeon who identified not one but ultimately three more tumors in her brain. They sent her to an oncologist. That oncologist scheduled a PET scan that showed a small spot on her left lung, then a biopsy to see if it was malignant. On August 30th, sitting in the exam room with her husband, two of her daughters, and her third daughter on the phone from Kansas City, the oncologist told Kerri that she had Stage 4 lung cancer. In disbelief as to "how this could happen", her oncologist's vague reply was "Who knows, there's environmental issues, there's radon, more & more women are being diagnosed all the time with non-smoking lung cancer, particularly Asian women and no one knows why." This conversation occurred almost three months to the day of that June trip to the ER.

The cancer had metastasized from her lungs to her brain. While it was that oncologist who uttered the word "radon" to Kerri, two more months elapsed before a different specialist directly asked her if she had tested her home for radon. It was almost another three months and more information-seeking conversations before the Robbins' mitigation system was installed.

In those three months – a few more things happened.

Shortly after she was diagnosed, a neighbor who also had non-smoking lung cancer urged her to contact a thoracic cancer specialist and make sure the treatment plan she was on was the correct one for her.

Kerri says, "A few weeks after my last radiation treatment I was started on a daily chemo pill and things were finally starting to settle down, so I called to make an appt with the specialist, Dr. Wallace Akerley at Huntsman Cancer Institute in Salt Lake City. When I called, Dr. Akerley answered the phone, he told me I had called his back office. I was mortified, I had called the number on the website, but I think fate intervened. The first thing Dr. Akerley asked me was if I smoked and I said no, then he asked me if we had tested our home for radon. I told him I didn't know I needed to. He informed me it was one of the leading causes of non-smoking lung cancer diagnoses. One of my friends sent me a link for a free test from Utah Radon Services; she worked at a local hospital, and it was information she had available from work. We tested, threw it in the mailbox the morning we flew out to Kansas City to see my daughter and grandkids for a long weekend, and had results back in a week.

31.3 picocuries – that was the radon level in our home. I didn't know anything about radon but boy was that going to change."

There are so many connections in Kerri's story. What did Kerri do to change awareness? She says, first and foremost she was angry, more at the fact that as an intelligent woman, she didn't know anything about radon! Kerri says she had to let people know about this. She went onto her Lehi city Facebook page, telling her neighbors about radon. The next morning, she was still angry and determined to tell more people about what was happening to her. She reached out to a local news station, KSL-TV based in Salt Lake City, and spoke to them about the danger of radon and the fact that it was identified as the reason for her cancer. Almost immediately KSL-TV sent a reporter to interview her - on the same day that a mitigation system was installed in her home. KSL-TV also interviewed a radon mitigation professional and

Divver to gain additional insight. The station aired a follow-up interview in January for National Radon Action Month. After all of the outreach including the two interviews, over 27,000 radon tests were completed in Utah.

After mitigation, her house tested at 1 pCi/L.

As a result of doing outreach to her own community through Facebook, Kerri found out her neighbors didn't know about radon either. They started testing. Out of the approximately 50 – 60 homes in her immediate neighborhood, 37 owners reported back to Kerri after testing. Only one home (just two doors down from Kerri's) tested under 4 picocuries. So in her neighborhood, two in three homes have high radon levels.

In addition to speaking at Indoor Environments 2023 in Nashville, Kerri has attended numerous events in senior centers and libraries educating people about radon and testing, and attended numerous home shows. Also, Kerri testified to support Representative Gay Lynn Bennion's ultimately unsuccessful request for funding for radon test kits to be distributed through Utah's newborn program.

Kerri also convinced the city of Lehi to pass a proclamation declaring January as Radon Action Month in 2024. Additionally, she encouraged her city to include a sentence in their annual tax bills to test for radon. Kerri says, "admittedly it's a small thing, but every bit of outreach for awareness helps." She continues to be motivated to encourage people to test their homes and tell people about radon.

Kerri is the first to say she is so lucky and blessed that her cancer was caught as early as it was. While she is now in remission, she still deals with post-cancer treatment issues such as soft tissue radiation burn therapy.

CHARTING SUCCESS TOGETHER WITH THE ARPC

The **American Radon Policy Campaign** is the association fund that fuels IEA's public policy advocacy work by lobbyists and legislative consultants.

Why is ARPC needed?
To support a strong and vital presence representing the radon industry before state legislatures, Congress, and state and federal agencies to (1) drive awareness that radon is the second leading cause of lung cancer and (2) encourage enactment of laws that reduce risk of radon exposure.

How does supporting ARPC help the industry?
The resultant policies drive demand for measurement and mitigation – supporting **radon professionals saving lives.**

What has ARPC accomplished?
ARPC has delivered funding for the SIRG program, assisted chapters enacting state laws to regulate through certification and warn prospective home buyers and tenants about radon, and secured meetings with key policymakers to build long-term support for meaningful state policies for credentialing radon professionals, testing buildings, notifying prospective home buyers and tenants, and adopting effective code requirements in new buildings.

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Member Spotlight: **Chris Lutes**

Location: Chapel Hill, NC
Principal Technologist, Jacobs

IEA: How long have you been working in the soil gas industry?: For 22 years

IEA: Describe your professional experience and what attracted you to this work (your "ah-hah" moment): I have been working as an environmental chemist for 33 years.I was attracted to the combination of interesting scientific questions and practical applications to benefit people offered by the field. I focused on analytical chemistry in my undergraduate training and research at UVA. My graduate studies were in an interdisciplinary environmental science department in a school of Public Health at UNC. My master's thesis examined atmospheric chemistry of semivolatile and particulate bound halogenated compounds using a smog chamber and mass spectrometry. I then started work at a research chemist for an EPA contractor, initially focused on sampling and analyzing combustion byproducts. When my firm was acquired by a larger consultant I was asked to step into running a soil and groundwater treatability and fate & transport laboratory. That led to pursuing and managing a series of technology demonstrations of remediation technologies for government agencies. I then had opportunities to combine my background in atmospheric sampling and analysis with soil/groundwater issues by studying vapor intrusion, both for commercial clients and for the US EPA. I worked with EPA scientists who had a background in radon studies and an interest in applying radon as a tracer for volatile organic compound vapor intrusion. Going all the way back to college I have been involved on a volunteer basis with housing repair/construction and building maintenance which has taught me a lot about buildings that is valuable in my professional life. I have now been working primarily although not exclusively on vapor intrusion sites and topics for about 15 years.

IEA: What does your typical workday look like? My work is a mix of scientific thinking/data analysis, advice to project teams, project management, and sales. No two days are the same, and few turn out like I was expecting them to in the morning.

IEA: What do you like about working in your profession?: I appreciate the opportunity to continue learning and pushing the field forward – combining the science of chemistry with the tangible historic aspects of studying buildings. I enjoy the collegiality of both my coworkers at Jacobs and those throughout the industry.

IEA: What benefits does membership to Indoor Environments bring you: My primary role with Indoor Environments Association/AARST has been as a member of the ANSI/AARST committee writing a national mitigation standard for 1-4 family residential buildings that was adapted as final (2014-2020) and then with the ANSI/AARST committee updating and revising national mitigation standards for residential, commercial and schools (2020-2023). Since 2021 I have been serving on the NRPP Certification Council working to develop a VOC mitigation national credential. I have learned a lot from the work of these committees – combining the expertise of hands-on practitioners in many parts of the nation, with researchers, regulators, and trainers. We have had some very in-depth discussions drawing on the results of decades of research, thousands of structures worth of experience, tempered with our mutual understanding of client/consumer priorities and market forces. The relationships built through that work have been invaluable to me in being able to know who to ask for a "sanity check" or a "did anyone ever study X"?

IEA: Do you have any advice for people who are considering becoming a member: I would encourage folks in the industry to get involved and share their perspectives. The industry as a whole has an important mission in public health protection, and by learning from each other we can continue to improve the standard of scientific practice in the industry.

Wisconsin's Vapor Intrusion Partnerships, Public Outreach And Passive Sampling

By Jennifer Borski, Department of Natural Resources, Vapor Intrusion Team Leader

In response to the growing concerns associated with chemical vapor intrusion, the Wisconsin Department of Natural Resources (DNR) introduced a comprehensive statewide effort that includes partnerships with other agencies, public outreach and training, targeted state-funded investigation and mitigation at priority sites and the use of alternate sampling technology. The DNR's efforts have resulted in greater awareness of the health risks associated with vapor intrusion and investigation and mitigation of vapor intrusion risks at sites throughout Wisconsin.

The DNR oversees responsible parties who conduct investigations and clean up environmental contamination in Wisconsin. Investigations typically include an evaluation of soil, groundwater and soil gas samples to determine the severity of the plume and how far the contamination has spread. As part of the investigation, the environmental consultant evaluates the potential for vapors to off-gas from the contamination and result in accumulation in indoor air. When the air people breathe in nearby buildings is affected by the contaminant or "plume," it is expected that a mitigation system be installed to protect human health.

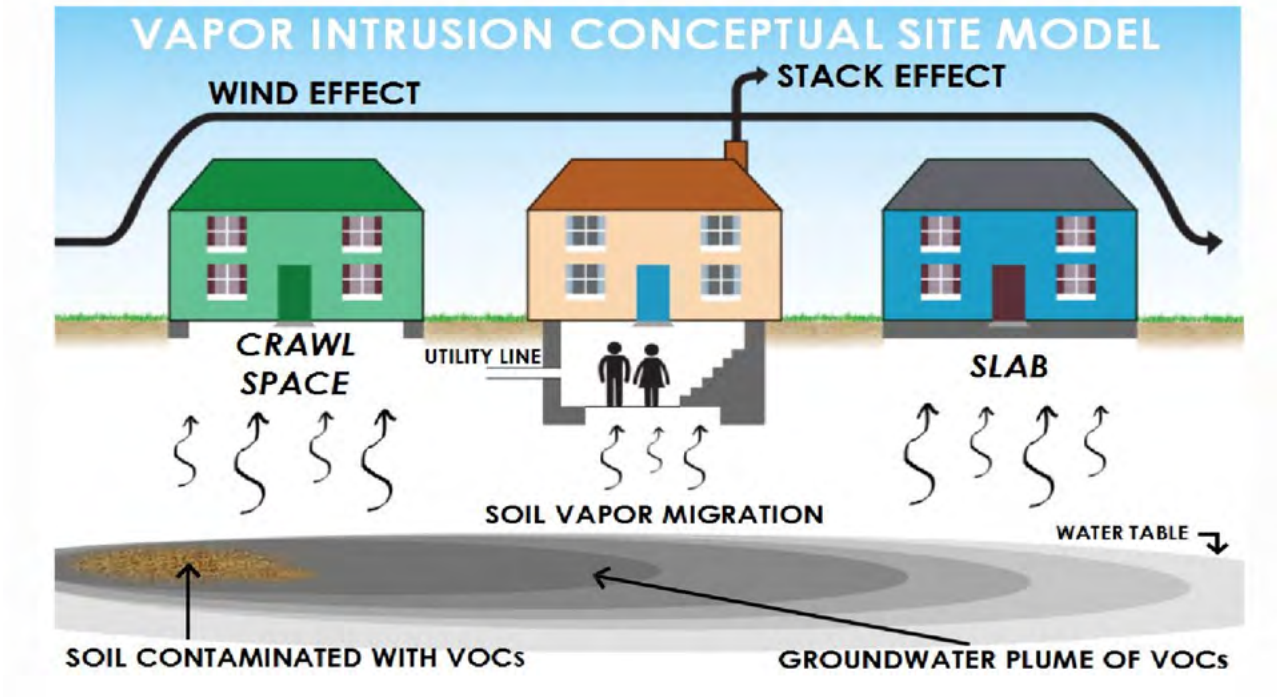
However, there are several sites where the responsible parties are unknown or unable/unwilling to proceed with the required work. For example, progress in investigating the contamination has stalled or the contaminated property has been abandoned by the original causer. Because vapor intrusion from some contaminants can present acute (short-term) human health risks, the DNR selected three environmental consulting firms through a competitive procurement process to perform state-funded work at vapor intrusion sites throughout the state where investigations have stalled. Although certified mitigators are not currently required for vapor intrusion mitigation in Wisconsin, two of the contractors selected for this effort are certified by the National Radon Proficiency Program (NRPP) and experienced with vapor intrusion mitigation.

The DNR developed a method, coined the Vapor Intrusion Risk Evaluation and Response (VIPER) Program, to assess risks and prioritize stalled sites with the potential for vapor intrusion. Considerations include:

- The concentrations of the chlorinated solvents, tetrachloroethene (PCE) and trichloroethene (TCE), in soil, groundwater and soil gas.
- Vapor impacts to sanitary sewers.
- The number of buildings at risk for vapor intrusion.
- Surrounding land use.
- The population within 100, 300 and 500 feet of the source of contamination.
- The Center for Disease Control & Prevention (CDC) 's Social Vulnerability Index (SVI) rating for the location.

The sites selected for evaluation in 2023 and 2024 included six dry cleaners, a formalwear facility with suspected dry cleaning and three industrial operations that historically utilized TCE. The scope of work for each location includes collecting vapor samples in sanitary sewers, within rights-of-way and beneath and within residences. When investigating vapor intrusion at residential properties, vapor investigations include the sampling of sub-slab vapor, indoor air on each level (e.g., basement, crawl space, first floor and second floor) and outdoor air. If a sump is present, sump water and the headspace from the temporarily sealed sump will be sampled as well.

Traditional vapor investigations use evacuated canisters over a 24-hour period to collect discrete (grab) samples from exterior soil gas, sanitary sewers, sub-slab vapor and indoor air. The DNR has transitioned to using passive samplers over a one-to-two-week sampling duration for vapor intrusion investigations and is encouraging the use of passive samplers for vapor investigations in Wisconsin.



If sampling results indicate that indoor air is affected and mitigation is needed, the DNR designs, installs and commissions the mitigation system; develops a property-specific operation, monitoring and maintenance (OM&M) plan for the homeowner and documents all of the investigation and mitigation activities.

Partnerships and public outreach where the investigation is taking place have been critical to the program's success. The DNR works closely with its state and local health partners to provide the community and occupants with health-based information upfront and address health-related questions as they arise.

When possible, the DNR prefers to contact the municipality and property owners before sending printed outreach materials. The DNR's initial communications package includes an introduction letter to the municipality (typically including the local health, public works and community development departments) and the neighborhood to explain why the investigation is important to public health. DNR's communication is supported by easily understood fact sheets, including **What Is Vapor Intrusion?** (DNR Publication RR-892) and the Agency for Toxic Substances and Disease Registry (ATSDR) fact sheets on **PCE** and **TCE**. Additionally, the package includes access permission agreements. The DNR follows up with property owners and occupants as needed to provide information and gain permission to access the properties. Follow-up may include neighborhood canvassing with help from other partners such as state or local health agencies and community partners.

The state funds the investigation and mitigation work performed by the DNR under this program. To attempt to recover costs from responsible parties, the DNR may file a lien on the source property.

Long-term stewardship of the vapor mitigation systems, including OM&M of the mitigation systems, may become the responsibility of the property owner in the absence of a viable responsible party. Long-term responsibility to maintain a vapor mitigation system is assigned in a legally enforceable document that is publicly available through **the DNR's Remediation and Redevelopment Database**.

As of March 2024, the DNR has investigated 14 residential properties, nine sanitary sewer systems and a small commercial property. The DNR is in the process of conducting mitigation at two single-family and one 16-unit, multi-family residences. The DNR has also inspected and updated vapor mitigation systems previously installed without active alarms at a residence and small commercial property.

Going forward, the DNR plans to continue performing vapor investigations and mitigation under this program as funding and workloads allow.

For additional information, contact Jennifer Borski, DNR Vapor Intrusion Team Leader, at **Jennifer.Borski@wisconsin.gov** or Jim Walden, DNR Vapor Intrusion Technical Expert, at **Jamese.Walden@wisconsin.gov**.

The Florida Radon Map Project

By Mark Perry, Radon Testing Services

Author's Note:

After 13 years of operating a successful radon testing company in Illinois I moved to Florida to start over. When sharing my radon expertise with my Florida realtor, he remarked with surprise, "I've been a realtor for 16 years and have never even heard of anyone doing a radon test." Considering Florida has a mandatory radon disclosure statement for Real Estate documents, I was amazed by his response. Over the past three years of living in Florida, I have routinely encountered similar disbelief in radon from various sources - realtors, developers, and residents alike. Statements such as "There is no radon in Florida because I've never heard of it," or "the water table is too high for radon," or "radon is only found in basements." Some point to the EPA map of radon zones as why testing is not needed.

Frankly, I was annoyed and wanted some hard data to show disbelievers. The FL Department of Health reports "1 in 5 Florida residences has radon levels above the EPA action level."[1] The CDC's Environmental Public Health Tracking hosts a comprehensive website[2] that includes state and county radon data and statistics. However, I kept coming up with questions for which I could not find the answers. It was this quest for detailed county information that led me to obtain the raw data from the Florida Department of Health for over 300,000 test results conducted across Florida over 33 years. This endeavor led to the creation of what I term the Florida Radon Map Project. (https://radontestingservices.net/florida-radon-map/).

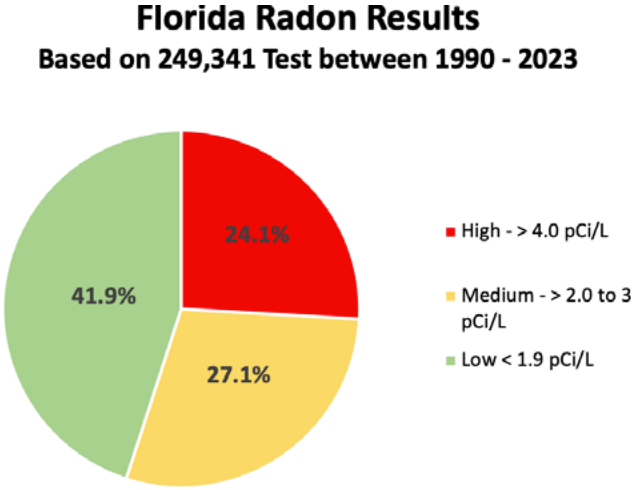
From this interactive map, any county can be selected to see a quick overview of the historical radon test data for that county. Augmenting the map are county-specific data sheets that provide additional details for that county. The Florida Radon Map Project serves as a free resource for anyone interested in understanding radon distribution in Florida. I hope it plays a beneficial role in the Florida radon industry and contributes to dispelling myths, raising awareness, and promoting safer living environments.

1 https://www.floridahealth.gov/environmental-health/radon/

2 https://www.cdc.gov/radon/index.html

The Big Picture - Statewide

The pie chart below shows the big picture of where the results landed. This validates what the FDOH has said for years: one-in-five Florida homes have elevated radon and should be fixed. Moreover, the data indicate that an additional 27% of homes fall within the cautionary range of 2.0 to 3.9 pCi/L, warranting consideration for mitigation consistent with EPA recommendation and ANSI/AARST measurement standards. The highest validated radon result in FL was from a house in Tallahassee, testing at 307.1 pCi/L.

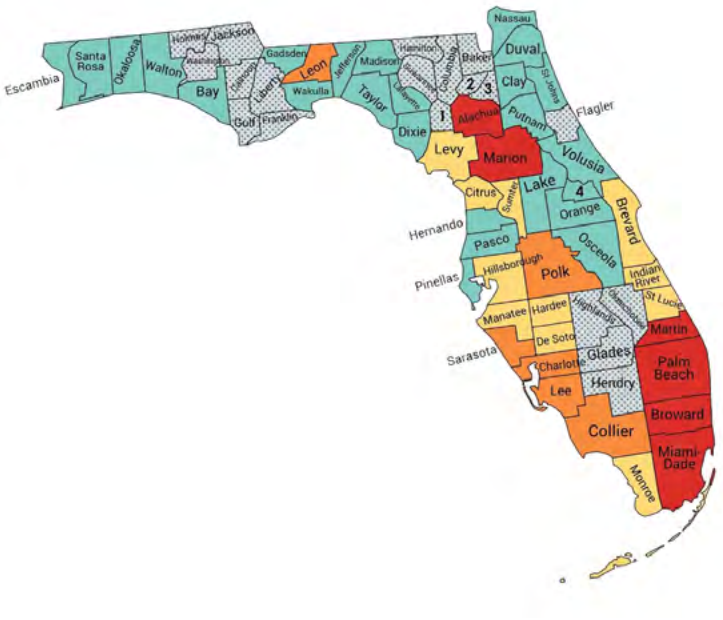


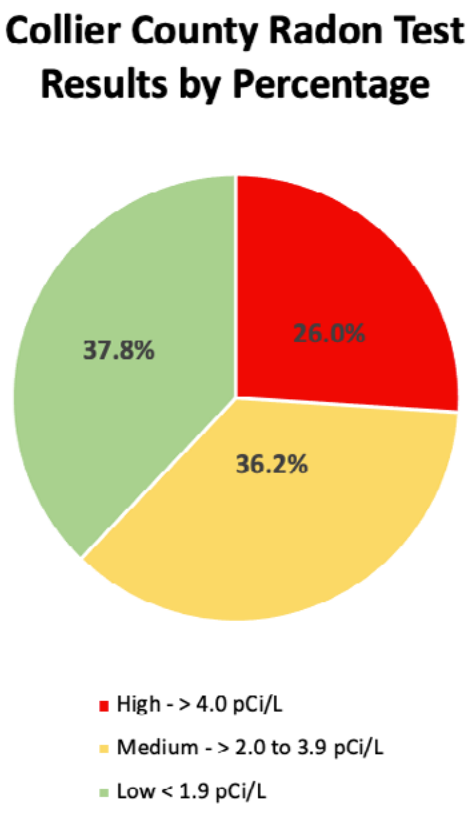
County Data

The specific county-by-county data can be found in the online version of this map. This particular color-coded map illustrates the distributions of elevated radon concentrations, determined by the percentage of high results. Approximately 7 million people, representing 32.4% of Florida's population, reside in the 6 counties colored red. Additionally, 10.5 million people, comprising 49.3% of Florida's population, live in the 12 counties colored red or orange. That population figure (10.5 million) is approximately the same as or greater than that of 75% of all other U.S states.

For counties with sufficient data and notable radon levels, a data sheet is available for printing or downloading. Below is a snap-shot of one county's data-sheet. This information will enable promotion of education and awareness regarding radon potential in areas in Florida, encouraging more testing and mitigation efforts, especially where realtors and even homeowners may be unaware of the importance of radon testing. Radon companies operating in areas with historically high radon levels - and elsewhere - can utilize this information for education by providing it to area realtors and distributing it to people with a platform to communicate, such as mayors; city, town, and county council members; and other local leaders.

"While individuals have the choice to test for radon or not, lack of awareness of risk deprives them of that choice entirely."





Radon Test Data	
Total # of Test	47,754
# of High Results (4.0 pCi/L or above)	12,424 (26%)
Highest Result	104 pCi/L
Location of highest result	Naples - 34105
Data for Upper Floors	
# of upper-level tests (not ground floor)	9,845
# of high results	2,356 (23.9%)
Highest results on upper floor	28.4 pCi/L on 2nd Floor
Uppermost Floor with high result	8.9 pCi/l on 22nd Floor
Housing Data	
Housing Units (per US Census)	233,658
% of housing units tested	20.4%
Population (per US Census)	386,000

% of test results considered high (4.0 pCi/L or higher). Fix the building.

% of test results considered cautionary (2.0-3.9 pCi/L or higher). Consider fixing the building.

% of test results considered low (<1.9 pCi/L or higher). Retest the building every 5 years.

Results of Upper Floor Tests

The question often arises: since radon comes from the ground, why does the measurement standard require testing on upper floors, such as in an apartment building or high-rise condos? One reason is that radon gets released from some concrete floors and walls. In one Florida skyscraper, a condo many floors above the ground was found to have elevated radon levels. At one time, concrete manufacturers used radioactive waste material (called phosphogypsum) left behind from Florida's phosphate mining industry as aggregate for the concrete. Aggregate, which is material such as sand or gravel, makes up approximately 60-75% of concrete.

Elevated radon on upper floors is a significant problem in Florida: 24.2% of upper-level radon tests conducted were 4.0 pCi/L or higher. Evidence from the Radon Map Data Sheets can be used by radon professionals in FL to assure their clients of the necessity of upper floor testing, even if the specific project does not require it.

UPPER FLOOR TEST DATA

Total number of upper floor test conducted	34,408
4.0 pCi/L or above	24.2% (8,334)
Highest floors with elevated radon.	44th floor – 4.1 pCi/L – Miami Dade County 37th Floor – 6.5 pCi/L Broward County 33rd Floor – 6.0 pCi/L Lee County
Highest radon on an upper floor.	72 pCi/L on 3rd Floor – Broward County 68.6 pCi/L on 5th Floor – Leon County 58 pCi/l on 5th floor - Broward County

Counties with highest amount of elevated radon on upper floors.

County	# Elevated Results	% Elevated Results
Brevard	95	52.5%
Palm Beach	1615	41.7%
Broward	1765	39.5%
Sarasota	77	30.4%
Lee	1560	29.7%
Orange	330	25.2%
Collier	2356	23.9%
Miami-Dade	777	12.7%

The EPA Radon Zone Map vs the Florida Radon Map Project

In 1993 the EPA created a map to help identify areas in the U.S. with different levels of radon risk. Based on the results of testing for radon in 5700 homes, geologic factors, and ambient air data, the EPA categorized 3000 plus U.S counties into one of three radon zones based on the predicted indoor radon levels:

- Zone 1: High potential; predicted average indoor radon levels greater than 4 pCi/L
- Zone 2: Moderate potential; predicted average indoor levels from 2.0 to 3.9 pCi/L
- Zone 3: Low potential; predicted average indoor levels less than 2.0 pCi/L.

Although EPA has stated that the county data and map are no substitute for testing a home, and that its map should not be used to determine if a home should be tested, home builders, building codes, realtors and others use this information to determine whether to test or to require testing.

The below table shows some of the Florida counties that are likely miscategorized by EPA's map.

County	County Average	% of results above ≥4.0 pCi/L	% of results between 2.0 – 3.9 pCi/L
EPA Zone 2 Counties - Moderate Potential			
Marion	6.1 pCi/L	47.30%	30.4%
Alachua	4.5 pCi/L	30.60%	30.6%
Maimi-Dade	3.2 pCi/L	30.20%	26%
Leon	3.1 pCi/L	21.70%	32%
Hillsborough	2.5 pCi/L	16.20%	21%
Polk	2.3 pCi/L	27.30%	30.4%
Citrus	2.2 pCi/L	15.10%	23.5%
EPA Zone 3 Counties - Low potential			
Broward	3.9 pCi/L	37.9%	26.5%
Lee	3.9 pCi/L	29.4%	36.3%
Palm Beach	3.6 pCi/L	33.5%	25.1%
Collier	3.5 pCi/L	26%	36.2%
Martin	3.4 pCi/L	35.3%	21.8%
Charlotte	3.0 pCi/L	21.5%	41.4%
Sarasota	2.9 pCi/L	13.5%	30.3%
Manatee	2.5 pCi/L	12.2%	27.9%
Levy	2.5 pCi/L	12.5%	47.5%
*Data taken from FL Radon Map Project			

Potential Applications of the FL Radon Map Project Data to Increase Testing

- Myth Busting: Providing actual data to dispel common misconceptions that suggest there is no or minimal radon in Florida.
- Education & Awareness: A resource for other radon professionals, residents, realtors, land developers and locally elected officials informing on the radon in their county.
- Support for Health Campaigns: Providing the data to county health offices to enhance their radon awareness campaigns and promote proactive measures for radon detection and mitigation.

Questions or comments for the author can be directed to Mark@RadonTestingServices.net

Sources:
https://www.epa.gov/radon/epa-map-radon-zones
https://fipr.floridapoly.edu
https://www.epa.gov/radtown/radioactive-material-fertilizer-production
https://www.census.gov/
https://www.floridahealth.gov/environmental-health/radon/

Pressure Field Extension Testing

Brittney Christie and Gunnar Barr, Obar Systems, Inc.

Abstract

The most important step in a Sub-Slab Depressurization System (SSDS) design process is Pressure Field Extension (PFE) testing. This paper explores the importance of performing PFE testing prior to the design and installation of a SSDS.

Introduction

Why Diagnostics?

Sub-Slab Depressurization Systems (SSDS) are designed to continuously apply vacuum to the soil beneath the slab thus creating a negative pressure field beneath the building. Vacuum is applied through a network of pipes and an externally mounted fan; the soil gasses are exhausted above the roofline.

The primary goal of PFE testing is to determine the radius of influence produced at a given

applied vacuum and resulting airflow yield. It is critical to understand the soil permeability and have knowledge of the aforementioned goals prior to the design and installation in order to maximize the efficiency of the SSDS.

Experimental

Pressure Field Extension Testing Process

The Pressure Field Extension (PFE) testing process consists of installing diagnostic suction points strategically located throughout the building at locations best suited for full-scale suction points to be installed as part of a mitigation system. The flow and vacuum characteristics of the soil beneath the slab are defined through various vacuum levels applied to the sub-slab material through the suction holes. Pressure differential measurements are recorded at a series of smaller diagnostic test holes drilled at various distances from the suction point(s). These measurements are taken at multiple levels of applied vacuum. The measurements taken along with the data collected throughout this process determine the Radius of Influence (ROI). Using the ROI and other data gathered during PFE testing, the number and location of suction points, pipe diameters, and fan type needed to mitigate the building can be determined.

Pressure Field Extension Testing Equipment

A fan capable of applying multiple levels of applied vacuum that covers a range of commercially available mitigation blowers is used by the technician performing the PFE testing. Vacuum and airflow are measured as close to the slab as possible. Carbon filtration is used on the exhaust if it is not practical to rout the fan discharge outside the building.

Results

Case Studies

Presented below are three (3) examples of different case studies that support and provide evidence of why Pressure Field Extension testing is necessary prior to system design and installation.

Case 1: Side by Side Buildings

At right (Figures (1) and (2)) are diagrams of two, nearly identical buildings constructed side by side, approximately 100 feet apart, in rural Michigan. Data collected from the buildings showed completely different ROIs. Data collected in Building 2 indicated a 12-foot ROI produced at 30 inches of water column ("w.c.) of applied vacuum with a resulting 5 cubic feet per minute (cfm) airflow yield. Building 1 data indicated a much greater ROI of 55-feet given 8 "w.c. with a resulting airflow yield of 30 cfm. The results of the PFE testing resulted in drastically different designs with Building 1 featuring a single, high airflow blower paired with a 5 suction point mitigation system and Building 2 requiring approximately 840-feet of horizontal drilling and 2 high vacuum mitigation blowers.

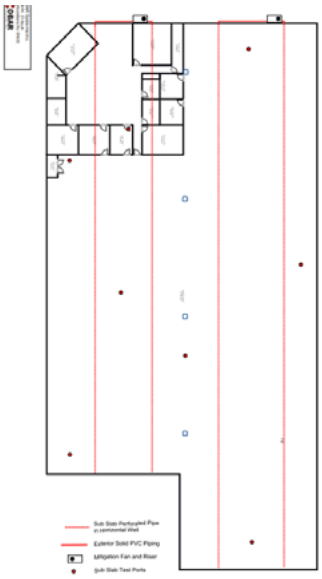


FIGURE (1): MICHIGAN BUILDING 1

FIGURE (2): MICHIGAN BUILDING 2

Case 2: Building Constructed in Stages

Pressure Field Extension testing was performed on a single 25,000 square foot warehouse with multiple additions located in a suburb of New York City. The data collected from the PFE testing indicated that each addition had different ROIs as a result of soil types and settling along the perimeter walls.

Figure (3) at right shows the building of concern. The outlined areas represent the five (5) unique building zones. PFE testing was done in each zone to determine the ROI.

Red Zone: This zone featured compacted native soil. The data collected showed a 20-foot ROI at 12» w.c. applied and a 10-cfm airflow yield.

Blue Zone: The soil profile in this zone was loose, sandy soil. The data collected showed a 30-cfm ROI at 12» w.c. and a 10-cfm airflow yield.

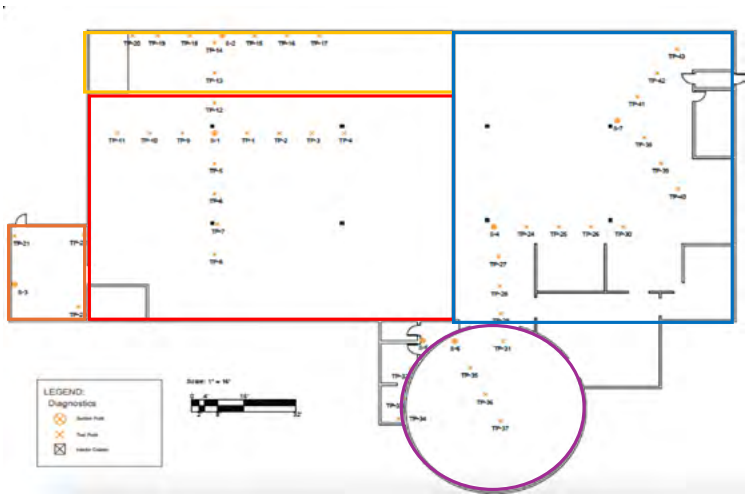


FIGURE (3): NYC SUBURB BUILDING ZONES

Purple Zone: Crushed stone was observed beneath the slab, which generally results in high airflow yields. The ROI completely covered the room (in excess of 50 feet) with only 1.8» w.c. of applied vacuum and a 40-cfm airflow yield.

Orange Zone: The orange zone represents an area of the building that rests on an isolated slab restricting sub-slab communication with the remainder of the site.

Yellow Zone: This area featured soil settling around the building perimeter resulting in elongated ROIs along the wall but diminished ROIs into the center of the room. These ROIs were achieved by applying a vacuum of 12" w.c. and a 10-cfm airflow yield (as in the Red Zone.)

The final system design included 21 suctions points and two roof mounted mitigation fans in order to mitigate the entire building footprint. The system design is shown below in Figure (4).

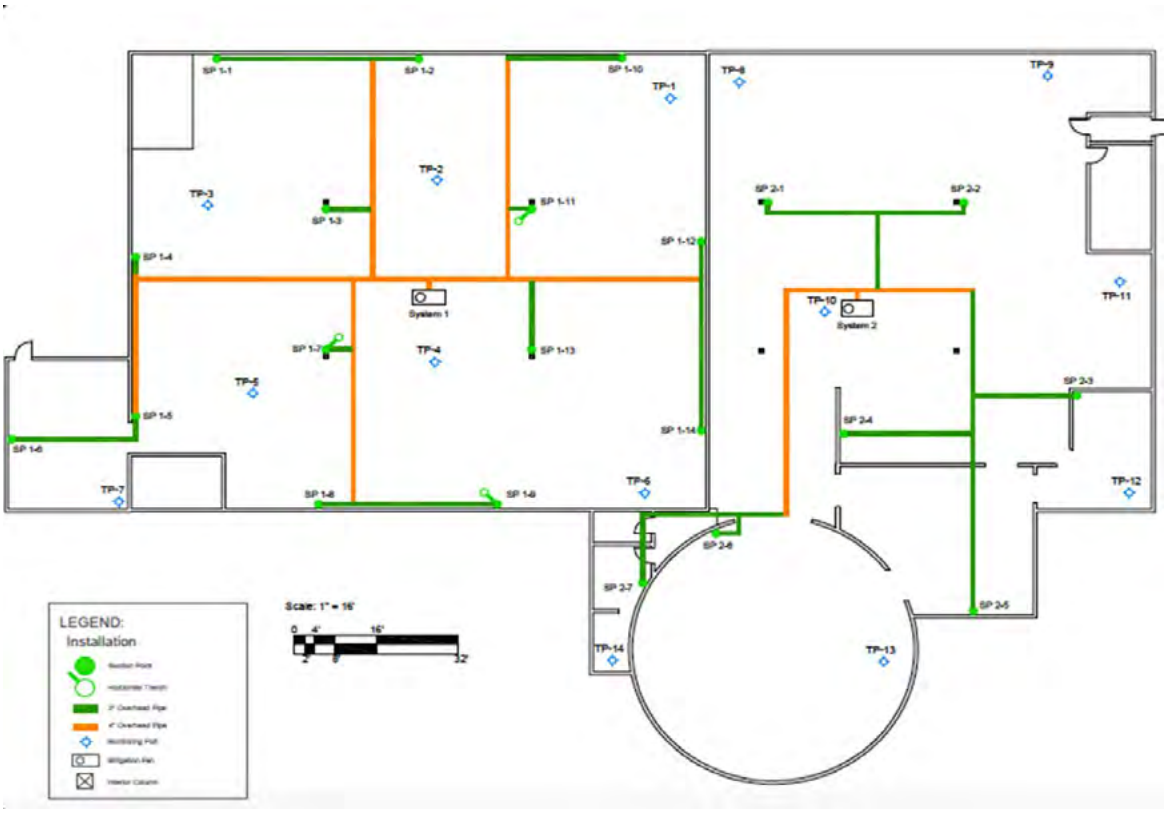


FIGURE (4): NYC SUBURB BUILDING SYSTEM DESIGN

Case 3: Building Influenced by Ground Preparation Prior to Construction

This building, constructed in one phase, was built into a significant hillside. Due to the topography, the rear third of the building was located above grade that had been excavated and backfilled with gravel. The center third was on native soil and gravel. The front third of the building was on compacted native soil. PFE testing data produced three different ROIs based on the underlying soil. As shown in Figure (5), ROIs vary based on the underlying soil types and compaction rates.

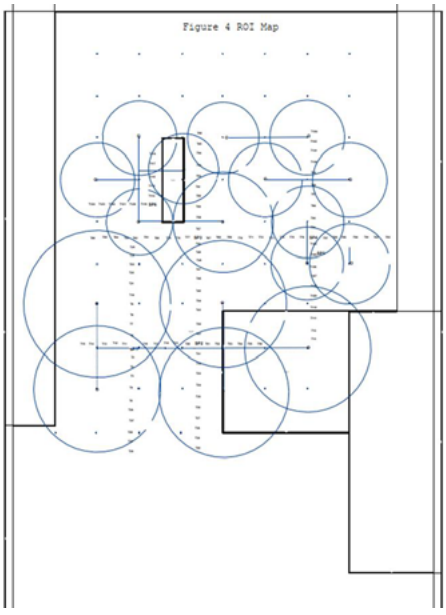


FIGURE (5): HILLSIDE BUILDING

Conclusion

Determining ROIs using proper PFE testing is required to design a SSDS system that ensures maximized efficiency and sub-slab vacuum coverage. As demonstrated in the above case studies, ROIs cannot be assumed or extrapolated based on limited data sets and must be calculated throughout the building.

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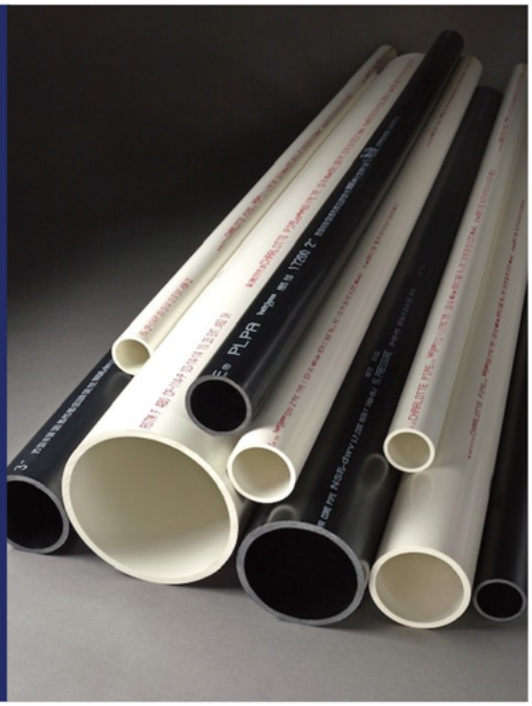

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Job Task Analysis (JTA) Volunteers Needed

Did you know that NRPP's credentialing programs are developed by mitigation and measurement professionals?

Did you know that you can participate and help set the bar for competent practice in your industry segment?

In 2024, NRPP is building (or rebuilding) credentialing programs and is seeking radon and vapor intrusion experts to help develop credentials for the following certifications:

- Radon Mitigation Specialist/Installer
- Radon Measurement Professional/Field Technician
- Commercial Mitigation Manager
- Commercial Measurement Manager
- Vapor Intrusion

NRPP needs experts to develop fair and valid certification programs that define safe and effective practice for measurement and mitigation professionals.

What's a JTA? A job task analysis is a formal process for identifying the knowledge, skills and abilities (KSAs) that are required for competent practice in a profession or given job role and determining the overall exam blueprint. Together these serve as the foundation for training courses and examinations.

What's the role of volunteers? Experts who participate in the JTA process are responsible for identifying KSAs and establishing the exam blueprint (not the exam questions), as well as proposing requirements for certification (such as eligibility, pre-requisites, recertification activities and interval, etc.) for consideration by the Certification Council, which is ultimately responsible for approving requirements.

What time commitment is involved? Each participant would be expected to attend two sets of four 4-hour remote meetings approximately 6 months apart - or 32 hours. Participation will include some meetings in 2024.

What are the requirements for JTA participation? If you currently work as a mitigator or measurement professional, or supervise mitigators or measurement professionals, or have experience in either of these we encourage you to participate. You do not need any experience or prior training in certification or exam development.

For more information, or if you are interested in joining us, please complete the application form **HERE.**

Certification Council Seat Vacancies

Do you have relevant experience, knowledge, and want to make a positive impact? The National Radon Proficiency Program is looking to fill two vacancies on the Certification Council.

This solicitation is directed at individuals willing to serve for six months, plus an additional three-year term, who could effectively represent the following sectors:

- Radon Mitigation – Large Buildings
- Consumer Interests

The NRPP Certification Council is the body that establishes criteria for initial approval and maintenance of NRPP radon certifications. This is a critical role for the radon industry and as such requires the input of individuals representing various stakeholder groups. The role of the Certification Council is particularly important as the NRPP is in the final steps of the process of restructuring its program to better fit the radon industry as it exists today with expanded application to commercial building testing and mitigation, as well as vapor intrusion, while paying close attention to the historic base of radon in homes.

If interested, please click here to review minimum qualifications for the seat in which you are interested and complete the qualification form.

Applications will be reviewed on an ongoing basis. If a suitable candidate is not found, seats will remain open.

Badges for NRPP-Certified Individuals – Now Available for Download

NRPP has created new digital badges for certifications. The badges can be downloaded by the certified individual from within her/his NRPP certification portal under "Formal Documents." Badges can be used on a variety of business materials, such as websites, email signatures, online report forms, vehicle wraps, and other promotional materials. Each individual badge displays the certification type, unique number, and expiration date. Badges inserted in online material can be linked to the user's profile on the certification website to enable potential customers to confirm your certification status online.

The NRPP brand communicates the program's identity and the exceptional quality, value, and service provided to the industry and the public. As one of only two EPA-recognized credentialing programs, and the only one accredited by the ANSI National Accreditation Board for meeting the requirements of the ISO 17024 Conformity assessment: General requirements for bodies operating certification of persons standard, NRPP protects its unique brand on behalf of the 2800 individuals already certified and others who will enter the industry in the future.

Please make sure and familiarize yourself with the NRPP Brand and Logo Usage Guide prior to using these badges. To access the guide, please **CLICK HERE.**

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February
Catherine Regan (MA), Daniel Medina (NJ), HARRY SMITH (IL), John Rolnicki (IL), Joseph L Danes (ID), Kelli Nicholson (IL), Larry Hoeger (NJ), Peter J Decker (IL), Scott Frantz (IL), Timothy Poffenbarger (IL), Wayne Murphy (CO)

March
Ashton Clarke Hines (TN), Ben Stebbins (IL), Carol Fisher (IL), Christopher Tyler Bradley (CO), Craig Martin (IL), Danielle Caldwell (MA), David Turner (CO), Diana Hunter (MA), Edgar Lange (NY), Efrain Rodriguez (IL), Frank Woods (MA), Keith Garstecki (IL), Kenneth Bradley (CO), Michael Mendez (NC), Monica Haas (MA), Nick Jackel (TN), Ryan Farley (MA), Ryan M Slensker (CO), Tony Midmore (NV), William Kading (CA)

April
Alva Allen (MO), Ben Sear (BC), Christopher Brown (NH), Daniel Pritchard (CO), Dillon I Kingsbury (NH), Gregory Pucci (MI), Jody Marble (TN), John Deslauriers (VA), Ken Voyles (NC), Renee Criqui (KS), Scott D Loignon (NH), Sierra Lulli (GA)

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A. Layne Gebers (TN), Aaron Morris (IL), Alexander Johnsen (CO), Alexsandra Anteau (MI), Amanda J Turner (NJ), Andrea Self (MA), Ashwin Ashok (GA), Barrett Cramer (OH), Brian Hagler (IL), Brian Meyer (MN), Bruno Vassel IV (UT), Chad Dunham (IL), Charles Van Allen (KY), Christopher Bice (IL), Christopher R Weiman (CO), Daniel Cox (IL), David Scott (MI), Deborah Woodbury (IL), Denice McCalip (IL), Derek L Dobyns (IL), Donald O Payne Jr. (IL), Donna Griffin (IL), Douglas W Peters (KY), Erik Cox (MA), Gene Johnston (IL), Iann Eliason (IL), J.B. Shearer (IA), James East (IL), James s Emanuels (IL), Jesse Freeman (MA), Joel B Beaudette (MT), John Albright (IL), John Pesek (MI), Keith Clough (IL), Kenneth Feldman (CO), Kenneth Wayne Van Dyke (MN), Kevin Seise (NJ), Kimberly Dingledine (VA), Leonard C. Slosky (CO), Lora Gilbert (IL), Madeline Juffras (MA), Mark Douma (IL), Matthew Urm (NJ), Michael Stansbury (MD), Mike Albright (IL), Mike Dilger (IL), Nicole Copeland (MA), Phil Gould (IL), Phillip Martin Thomas (NE), Rich Mennecke (IL), Robert N. Ormerod (VA), Robin Lawson (IL), Ronald Rupp (MO), Ryan Hanlon (CO), Sarah Bowers (IL), Sarah E Chase (CO), Scott D Yarckow (MI), Sean Gilligan (NY), Shelby Amsel (MA), Todd Santanello (IL), Trevor Karns (IL), Victoria J Storner-Bhatt (IL), William Frost (MO), William Harris (IL), William Nicholson (IL), Wilson Sebastian (KY)

March

Abe Mendez (NC), Abigail Johnson (TX), Alan Zucchino (MA), Angela Trebicka (MA), Anna Stinson (MA), Brian Benasutti (MN), Brittany Sullivan (MD), Bryan Garrity (MA), Casey Wayne Bickes (TN), Chad Robinson (KS), Chris Juliano (MA), Christopher L Hayes (CT), Christopher Lutes (NC), Christos Kontomichalos (IL), Daniel Hunsaker (IL), David Dinsick (IL), David Hill (MA), David Naggar (MA), Dawn Oggier (FL), Dean Tognarelli (MA), Deise (daisy) Rezende (MD), Don Walker (UT), Edward A. Beauregard (MA), Elizabeth Teague (MA), Emmanuel Ortiz (TX), Eric Breese (MA), Eric Kuzniar (NC), Eric Lovenduski (NY), Eric Roth (NY), Fred A. Adams (NY), Gary Richey (ID), George Schambach (NY), Heather E Hatherly (MA), Howard Zidel (MA), James Landry (CO), Jeff Masse (NY), Jeffrey Kaplan (PA), Jennifer Long (IN), Jessi Moyle-Bickes (TN), Jill Hochmuth (MA), John DeChristopher (MA), Jon McCreath (NE), Jordan Clark (CT), Joseph D. Tropeano (AL), Joshua Clark (CT), Justin Myatt (TN), Kaber C Robinson (AZ), Kimberly A Croteau (MA), Lamita Hulsey (TX), Laura Weigle (IL), Mariellen R. Cherry (CT), Mark Franco (TX), Mark Manfrede (MO), Matthew Hendrick (MA), Melissa Edwards (MA), Michael Fatone Jr (NC), Michael L. Thomas (NC), Michele Kaulback (MA), Mike Zitek (MN), Nate Jones (TN), Nathaniel L. Burden, Jr. (PA), Nathaniel Webber (MA), Owen Reese (TX), Paul Fletcher (TX), Paul Owens (MA), Paul Smerz (IL), Rick Saulen (MA), Robert Cheney (TN), Ronald Carroll (MO), Shavaun Cotter (NJ), Shawn G. Price (MA), Stephen Green (SD), Steve Kostro (IL), Sydney B Price (MA), Tanner Francisco (IA), Timothy D. Paino (IN), Timothy Ryan Godar (IL), Tony Rossignuolo (IL), Tracy Heard (IL), Walter Irwin (MA)

April

Andrey Barshay (IL), Audre Aurelia Puskorius (OH), Azmi Alkurd (VA), Bill Dahlstrom (IL), Cameron Butler (NC), Craig Burden (ID), David Innes (BR), David L. Lawson (DE), Donald M Neag (IL), Eric Bastian (IL), Filamor Rivera (IL), James Duke Hunt (NC), Jason Meininger (CO), Jodi Reitz (OH), Josh Badman (IL), Kenneth Quick (MI), Kevin Chritz (CO), Kraig Kilton (NE), Larainne Koehler (NJ), Marcus Dudoit (CO), Maria Peterson (IL), Mark A. Perry (FL), Michael FitzPatrick (CT), Myca Bruno (NC), Patrick Bevis (IL), Patrick Howard (IL), Paulina Carlberg (IL), Peter Rosecrans (MD), Rachel Carter (MD), Rick Shaver (MT), Rob A Hartop (CO), Robert Carvalho (FL), Westin Brawley (CO)

Member Spotlight: William Frost

Location: Greater St. Louis Metropolitan Region in Southern Illinois and Eastern Missouri
Co-owner with my son Paul Frost at Evergreen Property Inspectors

IEA: How long have you been working in radon?
Since 2017

IEA: Describe your professional experience and what attracted you to to this work (your "ah-hah" moment): Radon became a central issue for me when I was inspecting a home and being followed by a father who was tentatively asking questions about radon. He finally stopped me and explained that his son who slept in the basement was recently diagnosed with a brain tumor. There was so much guilt in his eyes as he asked me if radon could have caused the brain tumor. I could feel the emotion as I listened to his concerns and saw the deep pain he was going through. Fortunately, I could tell him radon was most likely not the cause, but that look of pain and the lack of information about so many home health risks stuck with me. That same week a neighbor asked me to test her home radon levels which came back very high. She had two children who had slept in the basement for the past 10 years, but she had felt there was no risk as a passive radon pipe was built into the home. How many parents today are letting their kids sleep in basements with high radon levels in the home? I don't want them to feel that guilt, that pain, that feeling of failing to protect their family because they simply lack knowledge. Parents care, they just don't know about the risks posed by radon gas and it's a real risk factor we know how to detect and then reduce the exposure. I am surrounded by healthcare professionals; one sister is a pediatrician, another is a physical therapist, and my wife and daughter are nurses. My father passed away from a lung disease called Pulmonary Fibrosis after working in the construction field his whole life. I am a veteran who is active in the American Legion and I see every day how our environment affects one's longevity and quality of life. I am passionate about educating others on the risks of radon. It's my profession and my responsibility to be an advocate in my community.

IEA: What does your typical workday look like? I am the marketing and administration arm of the company. I often teach continuing education programs, attend networking events, oversee marketing, answer the phones, and participate on committees and boards within the industry while also handling all of our radon testing services in Illinois. I volunteered to assist with the Illinois Radon Task Force in 2023 and have done the same with Missouri legislation. Education and awareness are key to saving lives and I want to prevent as many illnesses and deaths as possible.

IEA: What do you like about working in the radon profession? There are so many aspects of this profession that are fun. We have science, math, building design and performance, education, and interaction with the community. Participating in health fairs and educating the public is very satisfying, especially when I run across someone else who understands the risks and has a passion for helping others. Helping real estate agents understand the risks is also heartwarming as you know they are going to help educate others going forward. We are literally saving lives and doing it in a very economical manner.

IEA: What benefits does membership to Indoor Environments bring you? I enjoy many benefits as a member of the Indoor Environments Association. Education, marketing, inspiration, and energy regeneration (we all need a boost of motivation from time to time). It has also helped with business planning as I utilize the network for industry connections and mentoring. Dan Potter, the current President of the Midwest Chapter Indoor Environments Association, was kind enough to allow a team of our employees to visit his shop at DuPage Radon Contractors last year where we toured their operation and had some great conversations. That connection alone has saved me thousands of dollars in mistakes I would have made trying to recreate the wheel. It has helped with connections to other associations such as the American Lung Association which has empowered me to reach out to local municipality health organizations to grow my sphere of influence in my region. I am a huge proponent of being involved in our industry and community and the Indoor Environments Association helps me learn and grow my network by providing resources of support.

IEA: Do you have any advice for people who are considering becoming a member? Become a member! Learn, grow, and give back. You will become a better person and a better resource for your community when you are knowledgeable and connected.

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Commercial Insurance for Radon Mitigation

Corey Mills, Mills Environmental Insurance Services LLC

It's a good idea for mitigation businesses to routinely review insurance coverages to confirm they are adequate for the operations performed.

Work with indoor air pollutants in any capacity should be covered by pollution liability insurance, which can be written as a stand-alone policy or packaged within an environmental combined form policy. An Environmental Combined Policy (ECP) typically includes three types of coverage: general liability, contractors' pollution liability, and professional liability. What separates the ECP from the standard business owners policies on the market is the coverage for pollutants. Policies will always define pollutants, and the variances can be wide-ranging, so be sure to confirm with your agent that vapors and low-level radioactive waste are included in the definition. Don't assume that work is fully covered just because a carrier provides your business with a policy.

Some owners may think "I don't need pollution coverage, there's no way they can blame me for radon exposure." This may be true, but the sad part is, it doesn't matter. A business owner will need legal defense to protect the company, and that expense adds up quickly. If the insurance policy excludes pollutants, the insurance carrier will deny the claim, and the company will be forced to cover the cost of defense and the potential claim settlement.

It is important to select an agent that understands the risk associated with the scope of work performed. Again, no two insurance policies are identical. The insurance agent should have a thorough understanding of the definitions and exclusions in the policy and be able to identify and select insurance carriers that are best for the business operations based on its exposures.

Even if all business operations are being covered correctly and with adequate limits, a critical element in assessing risk is to have client contracts reviewed by the insurance agent to confirm that the insurance policy coverage and limits align with those required in the contracts to be signed. An accepted Certificate of Insurance (COI) may not suffice. If a claim occurs, it could be detrimental to the business to discover its policy is not in compliance with the signed contract. For example, if a contract requires a $5M umbrella/excess policy, but the company only carries $1M in coverage, guess who's on the hook for the extra $4M? It's certainly not the insurance carrier.

If the business subcontracts work, check with the insurance agent on how the policy responds if a claim were to occur. The policy may have a subcontractor warranty endorsement stating insurance does not apply unless the subcontractor maintains insurance in force with specific coverage limits listed on the endorsement. It is good business practice to only use subcontractors that have adequate coverage limits and list your company as an additional insured on their policy while performing work on your behalf.

Insurance is about managing your risk, and at the end of the day, the amount of risk you are willing to accept is a business decision. Talk to an experienced agent to make sure your business is covered effectively so you can sleep comfortably at night.

FUN IN ORLANDO

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