

THE

RADON REPORTER

Practical Information for Your Success



Remote Exam Proctoring | Quality Assurance Plans
Tobacco Cessation Program | IEA Election Ballot



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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.



Letter from the President Kyle Hoylman

Embracing Our New Identity and Looking Ahead

Fellow IEA Members,

As we enter the final stretch of my term as President, I am filled with immense pride and excitement to continue to serve the Indoor Environments Association (IEA). We have transformed our brand from the American Association of Radon Scientists and Technologists (AARST) to IEA, securing our position in an evolving indoor environments landscape. Together, we've accomplished many of our strategic initiatives, but we have much more to achieve.

New IEA. New Era. The new IEA identity signifies our commitment to advancing research, education, and policy in the field of the built environment. It embodies our dedication to addressing the diverse challenges faced by professionals in our industry. As we embrace this new chapter, I am confident that our expanded focus will lead to greater collaboration, innovation, and impact.

Our election is underway. These elections are crucial in shaping the future of our association, and I urge all members to participate actively. We have an outstanding slate of candidates, each bringing a wealth of experience and a unique vision for IEA. Your vote is vital in selecting the leaders who will guide us forward and help realize our goals. Please take the time to review the candidates' profiles and cast your vote.

One of the most anticipated events this year is our annual symposium. Scheduled for September 15 -18, 2024, Indoor Environments 2024 will be in Orlando, Florida. The symposium is a cornerstone of our association, providing a platform for experts, researchers, and practitioners to share knowledge, explore cutting-edge technologies, and discuss best practices. This year's program promises to be exceptional, with a lineup of distinguished speakers, interactive sessions, and networking opportunities that will inspire and inform. I encourage you all to join us for this pivotal event and contribute to the vibrant exchange of ideas that defines our community.

I want to take this opportunity to **thank each of you** for your continued support and dedication to our mission. Your passion and commitment drive our success and make our association a beacon of excellence in indoor environmental health. Together, we will continue to make strides in improving indoor environments and safeguarding public health.

As we move forward with our new identity and prepare for the upcoming symposium and elections, I am optimistic and enthusiastic about what lies ahead. **I look forward to seeing many of you in Orlando and continuing to advance our mission.**



ALA AND IEA PARTNER TO PROMOTE TOBACCO CESSATION

By Jennifer Hobbs Folkenroth and Kevin M. Stewart,
American Lung Association

The American Lung Association and Indoor Environments Association Partner to Equip Radon and Vapor Intrusion Professionals and Their Families With Proven-Effective Tobacco Cessation Program to Lower Risks of Lung Cancer. About every two minutes, someone in the U.S. is diagnosed with lung cancer, and every day, lung cancer takes the lives of more than 357 of our friends, neighbors and loved ones. Lung cancer is the leading cause of cancer death in the U.S., claiming as many lives every year as breast, prostate, and pancreatic cancers combined. In 2023, it was estimated that in the U.S. there would be close to 238,000 new cases diagnosed. Radon is the number-one cause of lung cancer among never-smokers and radon is the second leading cause of lung cancer overall. According to EPA estimates, radon is responsible for about 21,000 lung cancer deaths every year. Smoking is the leading cause of all lung cancer deaths, accounting for between 80 and 90 percent. Cigarette smoking is the #1 cause of preventable death and disease worldwide and causes more than 480,000 deaths each year in the United States. This is nearly one in five deaths. Lung cancer risk from radon is much higher for smokers due to synergistic effects between radon and cigarette smoking. Radon is much more likely to cause lung cancer in people who smoke. In fact, smokers have been estimated to be from 8 to as much as 25 times more at risk from radon than never-smokers. However, since an estimated 20,000 or more lung cancer diagnoses annually involve patients who have never smoked, smoking history is not the only contributing risk factor.

Radon-Smoking Synergy

Considering tobacco smoke and radon exposure are the two leading causes of lung cancer, and exposure to both (i.e., synergistic risk) heightens the probability of developing the disease, it is important to acknowledge the benefits of radon exposure risk reduction and the benefits of tobacco cessation, and to help link individuals with proven-effective strategies to eliminate both from impacting individuals and families across the U.S. It is equally important to provide eligible individuals at risk for lung cancer with the education and tools to receive annual low-dose CT scans which can reduce the lung cancer death rate by up to 20 percent by detecting tumors at early stages when the cancer is more likely to be

curable. Nationally, only 4.5 percent of individuals at high risk for lung cancer have been screened. Lung cancer screening and early detection can save an estimated 500,000 additional years of life if all those eligible would be screened.

Benefits of Tobacco Cessation

Radon and Vapor Intrusion Professionals are experts on the benefits of radon exposure risk reduction but may not be as aware of the benefits of tobacco cessation. Regardless of a person's age or how long that individual has been smoking, quitting is the single most important action people can take to reduce their risk for respiratory diseases. Quitting smoking:

- Reduces the risk of developing Chronic Obstructive Pulmonary Disease (COPD).
- Among those with COPD, slows the progression of COPD and reduces the loss of lung function over time.
- Reduces respiratory symptoms, such as cough, sputum production, wheezing.
- Reduces respiratory infections, such as bronchitis and pneumonia.
- May improve lung function, reduce symptoms, and improve treatment outcomes in people with asthma.



As soon as an individual quits, their body begins to repair the damage caused by smoking and continues to repair itself for many years. Only 20 minutes after quitting an individual's heart rate drops to a normal level. Between 12 to 24 hours after quitting the carbon monoxide level in blood drops to normal and the risk of heart attack is significantly reduced. During 1 to 9 months after quitting coughing and shortness of breath decrease and lung function begins to improve. And 5 to 15 years after quitting an individual's risk of getting cancer of the mouth, throat, esophagus, bladder cancer and lung cancer is about half that of a smoker's while the risk of stroke and coronary heart disease is reduced to that of a never-smoker.

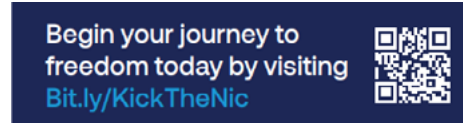
Proven-Effective Quit Strategies

The American Lung Association in partnership with the Indoor Environments Association (formerly AARST) wants to reduce the burden of smoking and vaping on radon and vapor intrusion professionals and their families by ensuring barrier-free access to evidence-based and proven effective cessation programming. The American Lung Association acknowledges that 70% of people who smoke and use tobacco products want to quit, and that 50% of them will make a quit attempt this year. However, 92.5% of people who try to quit will fail due to lack of having a comprehensive tobacco treatment plan. A comprehensive tobacco treatment plan that includes counseling plus use of FDA-approved cessation medications together is proven most effective in helping an individual break free from tobacco and nicotine dependence for good.

Evidence-based and proven-effective behavioral counseling programs are available, such as the American Lung Association's Freedom From Smoking® Program which has successfully helped over 1 million people across America quit over the past 40 years. Nearly 60% of participants quit when Freedom From Smoking® is used with an FDA-approved quit medication. Freedom From Smoking® is available in a variety of different modalities including a flexible self-paced digital option accessible through any digital device. The American Lung Association's 9-session digital online course Freedom From Smoking® Plus is a highly interactive behavior-change program that addresses today's mobile lifestyles. It's available in 38 different languages and works on desktops, laptops, tablets and smartphones and includes telephone, chat and email support from our tobacco cessation counselors. Freedom From Smoking® Plus is accessible whenever and wherever individuals go to support individuals wanting to quit tobacco product quit and break their addiction for good. The program includes a 12-month membership which allows participants work at their own pace and revisit the course if they have a slip or relapse.

Protecting Our Industry Members and Their Family Lungs and Saving Lives!

Through a special partnership with the Indoor Environments Association (formerly AARST), the American Lung Association has agreed to offer this program -- regularly \$99.95 per person -- **at no charge to radon and vapor intrusion professionals and their families.** To enroll and take advantage of this offer, IEA professionals and their families can use the unique URL bit.ly/KickTheNic or by scanning the QR code provided.



In addition to access to this proven-effective cessation program, the Lung Association is also providing support of radon and vapor intrusion professionals and their families in determining their medical insurance eligibility and better understand the seven FDA-approved quit medication options available through their Lung Health Navigators. Individuals can connect with this team of Certified Tobacco Treatment Specialists and Lung Health Professionals for more information by calling 1-800-LUNGUSA (1-800-586-4871 and press 2), submitting a question or live chat when available by visiting Lung.org.

Assessing Risk for Lung Cancer and Determining Screening Eligibility

Along with quitting smoking, it is equally important for individuals who are at high risk for lung cancer to be screened annually. Screening is a test used to detect lung cancer before any symptoms appear. Screening with low-dose CT scans can reduce deaths in those at high risk. If you meet the following criteria, you are considered to be at "high risk" for developing lung cancer and screening is recommended:

- 50-80 years of age
- Have a 20 pack-year history of smoking (this means 1 pack a day for 20 years, 2 packs a day for 10 years, etc.)
- AND, are a current smoker, or have quit within the last 15 years

The American Lung Association's interactive online tool helps individuals determine whether lung cancer screening is recommended by visiting SavedByTheScan.org.

If you have any questions about this initiative, please contact Jennifer.Folkenroth@Lung.org for more information.

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IEA Election Ballot

Voting in the 2024 IEA election opened August 30 and closes September 16 at 12 pm ET. Members have received by email IEA's balloting software the opportunity to select the Association's next Vice President as well as five National Directors (2-year terms) and one additional National Director (1-year term) seat open due to a resignation.



GEORGE SCHAMBACH

President and Owner, Professional Home Inspection Services, Inc.

George Schambach is an experienced home inspector and environmental consultant based in Deposit, New York. With a career spanning over five decades, he has a diverse background that includes owning and operating a petroleum business, working in the building supply chain, and managing corporate branches. Since joining Professional Home Inspection Service in 2004, and later acquiring full ownership in 2021, George has focused on expanding the environmental services offered by the business.

He is an active member of several professional associations, including IEA/AARST, Association of Home Inspectors, and NYS Home Inspectors Association, and holds multiple certifications in radon measurement and mitigation, asbestos inspection, mold assessment, and pest inspection. George has also contributed to the field through teaching, serving on various boards, and providing expert testimony on construction practices. Currently, he serves as the President of IEA/AARST New York chapter, Senior Vice President of the National Board of Directors AARST, and IEA/AARST Chapter Council Member.



REVEANN ELLROTT

President, Radon Testing Service Inc.

ReveAnn has been a leader in radon testing in California since 1991, significantly shaping radon awareness and promoting best practices in both commercial and residential markets. Through her strategic vision and dedication to excellence, RTS has become a trusted provider of comprehensive radon assessments in Southern California, boosting radon awareness in the state's real estate market. Her journey into radon science ignited a passion for understanding the relationship between different lithologies and elevated radon levels in Los Angeles. She holds a B.S. in Geoscience with a focus on Radon Research. ReveAnn's extensive experience and expertise make her an ideal candidate for a board member position. Her commitment to advancing radon awareness aligns perfectly with IEA's mission to safeguard public health from radon exposure and other indoor air contaminants.



AARON FRIEDRICH

Principal, ERM

Aaron Friedrich, currently serving on the IEA/AARST Board since his election in 2022, is a Principal Consultant with Environmental Resources Management (ERM). He holds a bachelor's degree (B.A.) and a master's degree (M.S.) in geological sciences from Hanover College and Wright State University, respectively. With over 18 years of consulting experience, Aaron has worked with clients managing complex environmental and vapor intrusion (VI) sites under US EPA and state-led regulatory programs. He has extensive project management and technical expertise in site investigation activities, soil and groundwater investigations and remediation, and VI pathway assessments and mitigation. Aaron has presented on VI at various local and national conferences, including the Battelle Chlorinated and Recalcitrant Compounds conference and the AEHS west coast conference. He has contributed to several ITRC teams and serves on the Board of Directors for Circular Indiana. He is also an adjunct faculty member at Indiana University, instructing students on natural resources and environmental policy.



ANNIE-LAURIE HUNTER

Owner, Ardent Home Inspections, LLC

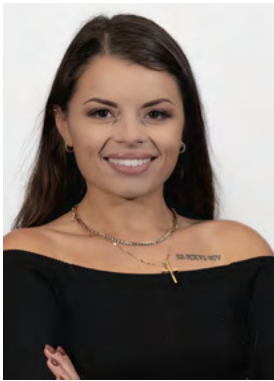
During her 20-year tenure as a home inspector, she has been intricately involved with Central New York (CNY) InterNACHI, CNY ASHI, and NYSAHI, serving terms as president of each. She helped initiate the legislation for NYS Home Inspection Licensing, law changes, and written test questions for inspectors. Her involvement with radon is extensive and dedicated. She established her NYS DOH ELAP lab in 2006, joined IEA/AARST in 2016, and became certified as a NRPP Radon Measurement Professional in 2017. In 2024, she will be certified as a Soil Gas Mitigation Inspector. Annie-Laurie is vice president for both NYS IEA/AARST chapter and CNY Coalition for Healthy Indoor Air. She is also a licensed NYS Wildlife Rehabilitation Specialist and founder/director of Hunter Hollow Bunny Bed and Breakfast, a domestic rabbit rescue and wildlife center.



DAWN OGGIER

Manager of Market Development, RadonAway

As Manager of Market Development at RadonAway, Dawn Oggier is a seasoned professional with diverse expertise. Formerly owning a Geological firm in Florida from 2008 to 2021, she holds mitigation certification from the Florida Department of Health, alongside credentials in water and air quality and a Business Management degree. Dawn's leadership extends to her roles as a National Director for the last four years and 4th year Chair of the IEA Symposium Committee, Vice President of the Florida IEA Chapter, Chair of the Bylaws Committee and a member of the OM&M Committee. In addition to relevant experience, Dawn has held a realtor license in Florida since 1996. Dawn's holistic experience spans real estate and environmental fields, reflecting her commitment to excellence in industry advancement.



LAURYN OGGIER

President, Radon Testing Service Inc.

Lauryn Oggier is the owner of Radon Group, a company specializing in radon. Before starting her business, she worked as a measurement technician. When that company closed, Lauryn decided to start her own radon business. Simultaneously, she was studying part-time at Santa Fe College in Gainesville, Florida, where she earned her A.A. in Business Administration. This achievement motivated her to elevate her company to the next level.

Despite her childhood expectations, Lauryn now leads a Radon Measurement and Mitigation company, inspired by her mother's work in the industry. As a young woman in this field, she recognizes the lack of awareness among her generation about the dangers of radon. Her main goal is to educate individuals about the importance of testing their homes for radon and to emphasize the crucial role of environmental health.



SHAWN PRICE

Director of Laboratory Operations, Spruce Environmental Technologies, Inc.

Shawn Price oversees the operations of three Spruce facilities, Air Chek (NC), and AccuStar's PA & MA laboratories. Shawn is a former AARST President and current Chair of the Standard Management Council (SMC). Additionally, Mr. Price chairs the ANSI/AARST MEAS standard, which covers the measurement of radon in schools, commercial, single-family, and multifamily buildings. Shawn brings 35 years of industry experience, including expertise in government affairs, laboratory operations, quality management systems, certification, and lab accreditation. Shawn shared: "Through investments in accredited standards and certification, we've become a reputable leader capable of influencing

policies concerning safe and healthy housing. State and Federal programs now seek our leadership and advice, a major shift from the past. While we haven't yet reached our ultimate goals, we can save even more lives and leave a robust, sustainable, and profitable industry for the next generation of IEA members by furthering partnerships that will help us educate policymakers."



KIMBERLY STEVES

Technical Assistant, CRCPD, Inc.

Kim was a health physicist for the State of Kansas for 34 years and retired in 2022 as the Director of the Kansas Radiation Control Program. As the director, she had responsibility for 23 staff, more than \$2 million budget, and the radiological emergency preparedness (REP), environmental, radon, X-ray, and radioactive materials programs, along with the Emergency Planning and Community Right-To-Know (EPCRA) program. Kim served as the Kansas Project Officer for the EPA State Indoor Radon Grant for more than 30 years. Kim is currently certified in Kansas as a Radon Measurement Technician and a Radon Mitigation Technician. Under Kim's tenure, Kansas promulgated laws for radon disclosure and for radon certification. Kim also served as the Governor-appointed State Liaison Officer to the U.S. Nuclear Regulatory Commission for Kansas. Since her retirement, Kim has been working as a technical assistant for the Conference of Radiation Control Program Directors, Inc.



MICHAEL WALTHER

Former Technical Business and Development Director, recently semi-retired

Michael E. Walther brings over three decades of environmental consulting and mitigation experience, including two decades with environmental/engineering due diligence firms, developing hazardous materials and radon investigation and mitigation programs, for nationwide lender and real-estate investor clients, to meet bank and agency loan standards. Michael remains active in the radon industry, exploring radon business synergies with several firms, and proposing a pilot awareness and testing program to small medical practice serving new and expecting parents. He also serves as a founding officer and Secretary of the Maryland Chapter of the Indoor Environment (pursuing regulatory requirements for certification and licensure), serves on the SG-OMM standards development committee, and plans commercial JTA support. He holds a Bachelor of Science in Natural Resources Management from the University of Maryland and multiple certifications in radon and hazardous materials measurement and mitigation.



DUANE WEST

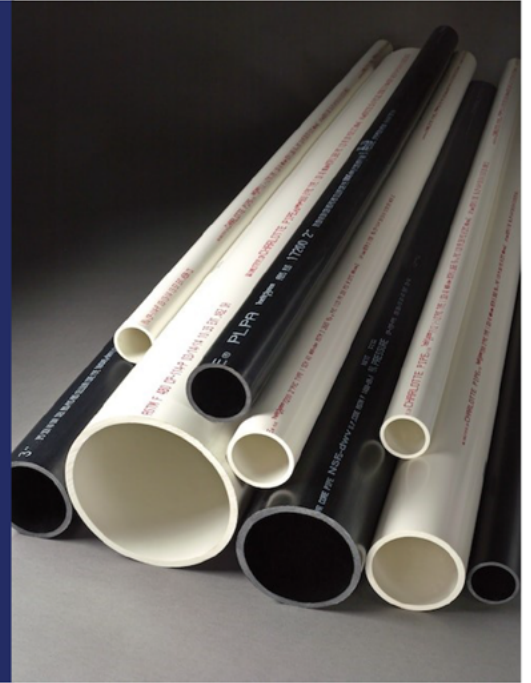
Owner, 3R's Construction and Remodeling

Duane West, a native Oregonian, is deeply passionate about life and its preservation. Actively engaged in the radon industry from both a mitigation and educational standpoint, he serves as an IEA/AARST Board member and chair of the NW Radon Coalition Advocacy Subcommittee. This year, he is advocating for Oregon legislators to expand required radon testing to include seniors, children, and underserved groups.

Duane collaborated with Oregon State University on a pilot program to educate students about radon gas dangers and empower them to spread awareness in their communities. He owns a construction company and is involved in various IEA/AARST committees, including National Director, Symposium Committee Chair, and Membership Committee Chair. Additionally, he teaches CE radon courses for real estate professionals and inspectors and is trained in mold and indoor environmental hazards. Duane is committed to promoting radon awareness from the classroom to the legislature.

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<https://aarst.org/memberships/>

Ohio Chapter Golf Tournament

On June 18th, at the Bent Tree Golf Club in Sunbury, the Ohio Chapter came together for the Fourth Annual outing to support legislative efforts in Ohio while enjoying a beautiful day.



2024 New England Radon Conference

The New England Chapter of AARST/IEA held its annual radon education conference on June 13th and 14th at the Spruce Radon Training Center in Ward Hill, Massachusetts.

State and regional radon and indoor environments updates were provided by: Amanda Parkins, Connecticut; Jon Dyer, Maine; Stefanie Santora, Massachusetts; Lea Anne Atwell, New Hampshire; Michelle Thompson, Vermont; and Dan Burke from US EPA Region 1.

Chapter President Ed Beauregard announced the results of the 2024 election, welcoming new President Michael Christophides and Vice President Matt Hendrick, and welcoming back Secretary Dave Hill, Treasurer Jordan Clark, and Directors Shawn Price, Christopher Gordon, and Josh Clark. Ed will also serve as a Director. Ed Beauregard was presented an award for his long service as a member and officer of the New England Chapter. Dave Hill presented an award to esteemed member, Pat Everett, for “surviving many years of the radon gauntlet.”

Thursday afternoon was devoted to two CE courses: “The Psychology of Sales: An Ethical Approach to Selling,” taught by Dan Raucci and “Advanced Diagnostics,” taught by Matt Hendrick. On Friday, Matt Hendrick presented an 8-hour course, “Soil Gas Mitigation Compliance Inspector.”



(l) Chapter Secretary Dave Hill presented an award to esteemed member, Pat Everett. (r) Incoming Chapter President Mike Christophides presented an award to Ed Beauregard.



IEA National presentation to NE Chapter

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What is Accreditation? ISO/IEC 17024

Amy Roedl, NRPP Proficiency Director

NRPP's Radon Measurement and Mitigation certification programs are accredited to ISO/IEC 17024: Conformity Assessment. General requirements for bodies operating certification of persons (2012), but what, exactly, does that mean?

Standards provide a framework for ensuring quality. **Accreditation is an independent, third-party evaluation of a conformity assessment body (certifying body) against recognized standards.** Although a number of certification standards exist in the marketplace, ISO/IEC 17024, Conformity assessment– General requirements for bodies operating certification of persons specifies requirements for transparency, impartiality, management systems, examination development, and development of certification requirements. Accreditation to ISO/IEC 17024, Conformity assessment–General requirements for bodies operating certification of persons is an indication that the certifying body is competent to carry out its certification activities and provides a global benchmark for quality certification.

ANAB is a non-governmental organization and a wholly-owned subsidiary of American National Standards Institute, Inc. (ANSI), which is a non-profit organization. ANAB, as an accrediting body, assesses and accredits organizations to international and domestic standards. ANAB ISO/IEC 17024 accreditation is the most widely accepted accreditation offered for personnel certification bodies and the most recognized program internationally.

ANAB accreditation to ISO/IEC 17024 requires that NRPP demonstrate competence in the following areas:

- Structure
- Resources
- Records and information
- Development of certification schemes
- Certification processes
- Management system

The initial accreditation process required NRPP to complete an application to allow ANAB to assess its compliance to the above requirements, provide evidence to support NRPP's response to each requirement, and participate in a two-day site visit with two ANAB assessors. During the two-day site visit in 2022, assessors reviewed and witnessed NRPP's policies, procedures, and processes. After being awarded initial accreditation, NRPP completes an annual surveillance application and reports on any changes that occurred

over the past year and provides evidence to support those changes. The accreditation cycle is a five-year cycle; one-day site visits are required every other year beginning the year after initial accreditation is granted. At the end of the five-year cycle, NRPP reapplies for accreditation, essentially starting from scratch.

NRPP's goal is to ensure its credentials mean what they are supposed to mean and do what they are supposed to do: identify individuals who possess the knowledge and skills necessary to effectively measure or mitigate radon to keep the public safe and protect their health and wellbeing. The market is full of certifications, many of which fall short in assessing the competencies required for effective performance in a job role or profession and leave consumers confused and unsure of whether the credential assesses skills needed by employers. There are options for those who are considering a radon credential; certifying bodies who adhere to a set of standards and best practices in certification development provide credentials that are valid and reliable indicators of professional competence.

ANAB accreditation to ISO/IEC 17024 is confirmation of NRPP's dedication and attention to quality.



EPA and ISO 17024

The US EPA has announced the intent that its revised framework for approving radon credentialing bodies would require that private certification programs be accredited by an EPA-recognized accreditation body under ISO/IEC 17024:2012, state-run programs that require a certification must rely on certifications only from an ISO/IEC 17024:2012 accredited certification body, and state-run credentialing programs' exams must be administered by an ISO/IEC 17024:2012 third party accredited certification body under the same conditions as those taking the exam for certification purposes.

Quality Assurance Plans and Standard Operating Procedures: What? How? Why?

Rebecca Turek, IEA Quality Assurance Manager

Radon measurement professionals – currently certified or candidate – often ask some variation of the question “How do I write a QAP (Quality Assurance Plan)?”

A QAP is important to a business because it helps to minimize errors in the delivery or manufacture of the product or service, improves efficiency and cost effectiveness, and promotes continuous improvement. In the radon industry, it keeps both professionals and their clients safer.

As part of a Quality Management System, a QAP should be maintained in conjunction with a set of SOPs (Standard Operating Procedures), data tracking, and regular audits.

The ANSI/AARST MS-QA 2023 Standard, which can be viewed for free online or purchased, offers a Sample QAP Manual template in the Companion Guidance, Section D at the end of the document. This is the first source measurement professionals should consult whether they are conducting a review of their current QAP or starting a radon measurement company and don't know where to start. It is applicable regardless of the size of the organization.

IEA's audits of QAPs have found that the most common areas of noncompliance are QC (quality control) tracking, chain of custody (COC) documentation, and a lack of SOPs.

The biggest problem observed, even if it's a great QAP, is that some radon measurement professionals don't do what they say they will do in their plan. Typically, this is evident in records that should be documenting QC activities. The professionals complete their spikes, duplicates, etc., successfully but they don't track or document it. Section A in the MS-QA Companion Guidance breaks down a spreadsheet sample, including the calculation formulas for each cell which can make documentation much easier.

There are a lot of ways a professional can manage the COC, whether software or a paper form. Spreadsheet records also work well once you get started. The purpose of a COC is to know where the data and devices were and who was responsible for them at all times. The benefit of a thorough COC is that, when it is necessary to address an error, bias, or other problem using a root cause analysis, issues can be more easily addressed if all of the relevant information is available. Even for a sole practitioner it is great to be able to provide this documentation should a test result ever be called into question.

A SOP serves to standardize a process. Section 2.3.9 in the MS-QA QAP template states that “The onsite technician is to document the location and serial numbers of blank detectors placed in the field.” If a company has 10 technicians, it is highly likely that after 10 jobs there would be 10 very different documentation results if that was the only direction provided to employees. One could take a picture, one could make a note on their phone, one could scribble in a notebook, etc. None of these are necessarily wrong, but it is best practice to have uniformity. A good rule of thumb is if you won the lottery tomorrow, your SOP should be thorough enough that whoever takes over the next day can come in and complete the work based on the SOP.

QAPs and SOPs can be living documents—if you want to change how something works at your company to make improvements outside of your internal audit schedule, go for it. As you make those improvements, it is best to update your documents to reflect those changes and supplement them with your CAPA (corrective and preventive actions) documentation.

A popular QA mantra is “If you didn't document it, it didn't happen!”

New NRPP Certified Professionals

May

Alexa G Snyder (IL), Austin L Milam (CO), Barry Mankin (TN), Brady T Timbrook (CO), Brian A Farley (CO), Brian K MacIver (MD), Brian Mankin (TN), Bryan C Jacobson-Reighter (IN), Chance Bertolami (CO), Christopher S Webb (MD), Christopher Tyler Bradley (CO), Cody Combs (KY), Cole P Bova (CT), Daniel Bright (CO), David A Dooley, President MJW Corporation (NY), David Beadles (MO), Dylan Strawser (OH), Edward R Hagstrom (OK), Emily Ambrosi (NJ), Eric S Gardner (AZ), Gabriela Cyrulik (CA), Glen Boley (UT), Jacob K Hansen (CO), Jarad S Hayden (CO), Jason Carmack (AR), Joel Fortenberry (CO), John A Strimple (NC), Jonathan J Walker (VA), Joseph L Danes (ID), Joshua K Moore (CO), Justin R Trujillo (CO), Kelsy Soderlund (MA), Kevin P Nelson (CO), Landen c Bullock (UT), Latima L Clark (OR), Levi Prather (GA), Marley Watkins (AZ), Matthew D Goldman (GA), Matthew G LaGrange (IN), Mercer Wright (NV), Michael J Schatzke (ND), Michael W Lingle (IN), Michelle L Everitt (CA), Mya A Smith (IN), Nathan A Bodnar (CT), Nathan J Brown (IN), Neil Pasko (CO), Nolan B Stowers (CO), Patrick R Seng (KY), Perry J Davis (CO), Randy G Scheer (ID), Robert W Finch (GA), Roo Beers (CO), Ryan Sodan (MN), Samuel McClanahan (CO), Sarah E Vitro (NY), Virginia K Duckworth (VA), Whitney A Davis (OK), William D Rittner (AR)

June

Anthony J Sigona (NY), Austin Giannasi (VA), David Christie (KS), David Meixell (CO), David Moss (CO), Drue B Marino

(CT), Dylan Brewer (CO), Florisel Rodriguez Cardoza (CO), Gareth W Kerlin (VA), Glenn D Tofani (CA), Haewoo Jeong (GY), Jason E Treadway (VA), Jason R Boyd (TN), Jeremy Stephens (GA), Julie L Hill (TX), Kathryn L Foster (CO), Keegan Begley (CO), Killan Pearson (CO), Lorris J Smith (CO), Luke Berneking (VA), Mark Seyfried (SC), Matthew D Goldman (GA), Maya Matsuoka (HI), Nayeli Isabela Diez de Bonilla (CA), Reginald S Brown (GA), Richard Holden (FL), Ronald L Rupp (MO), Sean Polce (MI), Steve Leslie (IL), Timothy W Peterson (MN), Tracy Peebles (MS), Tyler Sanderhoff (NY), William J Bausman (MN)

July

Adam Deeb (IN), Alex B Goble (CO), Blake N Thornton (MA), Brian Priddy (KY), Briana Aragon (CO), Colin Wogrin (CO), Dylan Nieman (TN), Dylan Strawser (OH), Dyllan Rose (OH), Eli B Kays (NC), Elijah Chamberlain (AZ), Erik R Cox (MA), Erin E Coulson (KY), Gabriel S Rupert (UT), Gary Fryman (TN), Guilherme A Barreto (MD), Haley Johnson (KY), Isaac C Bowling (KY), James C Robinson (KY), JoAnn M Rupp (MO), Josh Burgess (CO), Justin C Rest (VA), Karen s Hartley (IN), Keith Gavia (IL), Kent Molin (CO), Kevin Jones (NC), Leia Staples (KY), Logan Yamamoto (HI), Luke Y Feher (CA), Paige Williams (UT), Ray Ismail (IL), Robert H Blanchard (VA), Robert Lang (CO), Roxford J Daniels (CO), Sean W Work (CO), Stephen Gustav Geuder (CO), Steve D Hart (KY), Timothy J Gardner (VA), Timothy J Lanter (KY), Troy Mackey (CO), Tyler Battershell (IN), Whitney A Davis (OK), Zane P Byrne (CO)



Nathaniel L. Burden, Jr.
Radon Scientist/Radon Activist



Kevin Stewart
Director, Environmental Health



Jennifer Folkenroth
Sr. Director, Nationwide Health Promotions

Webcast

Radon-Smoking Synergy: Proven-Effective Strategies to Lower Your Risk for Lung Cancer

November 21, 2024

2 p.m. – 3 p.m. ET

Register at <https://bit.ly/SynergisticRisk>



NRPP Update: All NRPP Exams Are Now Delivered by Certiverse

NRPP partnered with Certiverse in the fall of 2023 to securely proctor the radon measurement exams remotely and has recently transferred all remaining exams over to the Certiverse platform. As of May 20, all radon measurement exams (RMP and RMFT), all radon mitigation exams (RMI and RMS) and the Compliance Inspector exam are proctored by Certiverse.

The requirements and rules for taking a remotely proctored exam with Certiverse are the same as those of the previous delivery provider, however the test-taker experience is different. Highlights include the following:

- Proctoring is no longer done through Zoom. To take an exam with Certiverse, test-takers must install a secure browser that “locks down” their computer to prevent them from accessing the internet, email, or other applications during the exam. This provides a level of exam security that goes beyond the previous proctoring method.
- Verbal interaction with the proctor is no longer required. Feedback from the 2023 candidate survey indicated dissatisfaction with the previous proctors’ oral communication with the test-taker. Now, all communication with proctors is done through a chat feature on the Certiverse platform.
- Another concern identified through NRPP’s 2023 candidate survey was the inability to take a test in an open-concept location and required the examinee to take the exam in a room with one door. With Certiverse, tests can now be taken in “open-concept” living spaces and no longer have to be taken in a room with only one door.

Results from NRPP’s 2023 candidate survey indicate that only 10% of test-takers had difficulty understanding the communications with the proctors at Certiverse in comparison with 90% of those who tested through the previous provider, and they experienced a greater level of customer support and more responsive and more professional proctors.

The rules for taking a remotely-proctored exam have not changed and are designed to ensure the security of the exam content while providing a testing experience that is as secure as brick-and-mortar in-person test centers. A working webcam and microphone are required to take a remotely-proctored exam, and examinees must take the test in a quiet, well-lit location where they will remain uninterrupted. During the onboarding process (before entering the exam), proctors ensure a secure testing environment. Examinees are expected to:

- Verify their identity by showing the proctor a valid identification
- Remove all notes or other materials from the testing area and demonstrate compliance by showing the proctor, through the webcam, the testing surface and the area around, behind, and under the testing surface.
- Place cell phone and all other electronic equipment out of reach

Once the environment has been approved, examinees are required to agree to the NRPP Exam Agreement and are then provided access to the exam.

While taking the exam, examinees may not read the questions out loud and may not move their faces out of view of the webcam. Proctors will monitor examinees for suspicious test-taking behavior and will interrupt the exam to warn examinees and correct behaviors when they are not compliant with the testing rules. Proctors are at liberty to terminate exam sessions when the testing rules are broken, when cheating is suspected, when examinees use profanity or are aggressive toward the proctor, or when behavior is not corrected after sufficient notice. Examinees may not use scrap paper or notes during the exam; all questions that require calculations include an e-calculator and formula sheet. Additionally, the ANSI/AARST Standards are available for use throughout the duration of the exam.

After the exam has been completed and submitted, examinees are notified instantly that they either passed or failed. Official results and score reports are sent to examinees within 3 days of the exam, after NRPP has reviewed the exam session and released it.

Instructions for scheduling an exam through Certiverse, instructions and technology requirements for taking a remotely-proctored exam, and testing rules are emailed to examinees upon registration. Examinees may contact Certiverse through the chat support feature on the Certiverse website at any time. Certiverse support will assist examinees with scheduling an exam, downloading and installing the secure browser, and accessing the exam on testing day.

For more information on NRPP’s measurement and mitigation exams, please visit <https://nrpp.info/nrpp-exams/>

ANSI/AARST Standards Revisions – Technical Bulletins

As a result of the hard work of the leadership and committees of the AARST Consortium on National Standards, American Association of Radon Scientists and Technologists (AARST) last June released the 2023 versions of eight ANSI/AARST Standards. These standards have been revised by their respective all-volunteer committees to, for example, include changes recommended by subject matter experts, make edits necessary to increase clarity, and achieve harmonization across standards. Below are the technical bulletins for two of the updated standards. Through this work, the AARST Consortium continues to lead the way in protecting public health and safety. For an extended look at the update of these two standards go to: [MA-MFLB 2023 – Technical Bulletin & Substantive Changes](#) and [SGM 2023-Technical Bulletin & Substantive Changes](#).

MA-MFLB 2023

Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily, School, Commercial, and Mixed-Use Buildings

The MA-MFLB 2023 standard is a comprehensive consolidation and update of the previous MAMF 2017 and MALB 2014 standards. This updated standard aims to streamline the protocols for conducting radon measurements in various building types, ensuring a consistent approach across different environments. Key revisions include:

- **Harmonization and Consolidation:** Merging the MAMF and MALB standards to create a unified protocol.
- **Enhanced Clarity:** Improved editorial clarity and integration of residential and commercial space requirements.
- **Detailed Test Procedures:** Updated sections on test conditions, locations, procedures, and reporting to ensure accuracy and compliance.

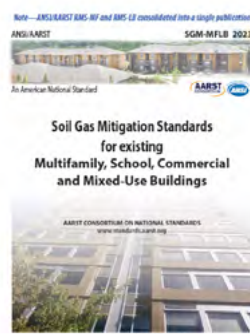
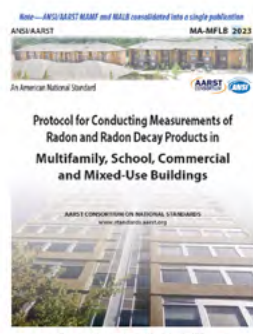
For more detailed information on the revisions and their implications, you can view the full technical bulletin and substantive changes here: [MA-MFLB 2023 Technical Bulletin and Substantive Changes](#).

SGM-MFLB and SGM-SF: Soil Gas Mitigation Standards for Existing Homes and Large Buildings

The SGM 2023 standards encompass the revised soil gas mitigation protocols for both existing homes and larger buildings such as multifamily units, schools, commercial, and mixed-use buildings. This update consolidates and harmonizes the previous RMS-MF 2018 and RMS-LB 2018 standards into a singular, cohesive document. Highlights of the revisions include:

- **Consolidation and Harmonization:** Combining RMS-MF and RMS-LB into a single standard, with a focus on consistent application across different building types.
- **Quality Control and Compliance:** New requirements for diagnostic inspections, quality control oversight, and post-mitigation evaluations.
- **Health and Safety:** A rewritten section focusing on a comprehensive safety management plan, including safety training.

For a further dive into the revisions, please refer to the technical bulletin and substantive changes here: [SGM 2023-Technical Bulletin & Substantive Changes](#).



Technical Bulletin: MA-MFLB

MA-MFLB 2023 Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily, School, Commercial, and Mixed-Use Buildings (MAMF and MALB consolidated and updated)

Objective

The purpose of this document is to provide concerned parties with an overview of recent revisions to the ANSI/AARST Standards, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings* (MAMF 2017) and *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings* (MALB 2014). These standards were recently revised, with MAMF and MALB consolidated into a single standard.

Scope

This Technical Bulletin addresses recent revisions and consolidation of two ANSI/AARST radon measurement standards. This bulletin is relevant only to these latest revisions. It does not address revisions prior to the 2014-17 updates, nor does it address revisions to any other ANSI/AARST standards that may have been recently updated.

Background

The AARST Consortium “Committee for Radon Measurement Standards” is the body responsible for continual review and update of all ANSI/AARST radon measurement standards. This committee is made up of industry, construction and regulatory professionals, and all proposed revisions are also subject to public review and comment. During the years since the 2014 and 2017 publication of these standards, the committee has reviewed, revised, consolidated, and finalized publication of the standards identified in this document.

Historical Overview

The ANSI/AARST MALB standard was published in 2014, along with the sibling standard, MAMF, in 2017. The scope of effort entailed a complete review and update of previously published radon measurement standards. Harmonization began in 2020, using the same text for identical tasks within MAMF 2017 and MALB 2014. For needs of compliance assessment after the fact, informational content was moved from within the standard to the attached companion guidance. With many requirements being the same, the effort also sought consolidation of MAMF and MALB into a single standard.

1/21 Transitional Revisions

Prior to consolidation of MAMF and MFLB, harmonized versions were published as revisions to the existing documents. The focus included Sections 2 through 8. Most informational content was relocated to the Companion Guidance.

Section 2 (Before Testing)- Improvements for clarity in introductory 2 (Preparing for the Measurement) included harmonizing the title (Before You Test), as used in ANSI/AARST MAH (measurement in homes). Improved editorial clarity and correctness was sought for each provision. Differences between residential and commercial spaces were integrated. For instance, as applicable to MALB but not MAMF, requirements "where not occupied both day and night" were included. This type of integration allowed expansion of scope to "Mixed-Use Buildings". Relative to test devices, the use of radon decay product measurement devices is relegated to the applicable ANSI/AARST MAH standard and not repeated in Section 8. Quality control for test devices was moved to Section 2 (previously in Section 5). Requirements relative to keeping records of each dwelling/unit were enhanced. Required communication with property owners/managers were enhanced and emphasized.

Section 3 (Test Locations)- Ground-contact and upper-floor test locations were integrated for both residential and commercial spaces. New: For school and commercial spaces, the testing requirement is limited to locations that are occupied or intended to be occupied.

Section 4 (Test Conditions)- Test conditions that include closed-building protocol were moved to Section 4. For all measurement standards, this is more closely related to preparation prior to testing and applicable to most all test procedures.

Section 5 (Test Procedures and Options)- The editorial renditions are drawn more from MAMF than the older MALB. However, the recommended "evaluations of occupied versus unoccupied locations" from MALB are integrated. Post-mitigation test protocols were moved to Section 7.3.

Section 6 (Conducting the Test)- The revision now further elaborates on details specifically related to actions at the project location. Topics previously only addressed in MALB (Section 2) for complicated HVAC issues are integrated here.

Section 7 (Actions Based on Test Results)- Section 7.2 adds the requirement that where two test results at different times disagree on whether concentrations are below or above the action level, the higher test result shall be regarded as correct, unless further testing indicates otherwise.

Section 8 (Test Reports)- "Documentation, Protocols and Guidance" is now harmonized into Section 8. Clarity on summary report content was harmonized with MAMF, to provide simpler uniform reports, while still addressing complications and nuances. Initial tests that did not include testing 100% of ground-contact dwellings or units does not comply with this standard. Further testing to comply with this standard is therefore required, as previously required in MAMF Section 7.1.8.1 f.

Section 8.4 (Summary Report Attachments) includes additional elaborations and requirements for summary report attachments include reporting building operating conditions for comparing annual average and during the test. This reporting seeks to address concerns relative to concerns previously addressed in MAMF Section 7.1.8.4 b and c.

Hourly data from continuous radon monitors is now required to be provided in reports or provided to the client upon request. Records of client communications and details for disclosures to State or Federal authorities are also provided.

Normative Appendices- Normative Appendices were created for providing guidance and requirements for (a) Reporting Building Operating Procedures, (b) Evaluation of Occupied Versus Unoccupied Concentrations, (c) Elevated Radon in Upper Floors, and (d) National Certification/Listing Programs.

2023 Revisions

Due to the MAMF and MALB renditions published as 1/21 revisions being virtually identical, few edits required review prior to consolidation into a single standard. MA-MFLB 2023, includes the complete harmonization of ANSI/AARST radon measurement standards and editorial rendering more compliant with needs for compliance assessment.

Revisions were made to Section 2.4 and Normative Appendix D regarding Qualified Professionals and private proficiency programs.

Clarity was provided to Section 3.4 regarding large rooms requiring multiple devices.

Where closed-building conditions did not occur prior to the test, option 6.1.2 b, which allowed prolonging the test to achieve a valid test, was modified from a period of a minimum of 4 days to a period of not less than 72 hours.

Section 6.2 (Quality Control for Number of Valid Tests) was modified, both for clarification and relaxation of previous requirements. A flowchart was added on the following page to provide additional clarity on intended calculations.

Section 8.2.3 (Reliability of the Measurements) was clarified with more detail on reportable conditions that can impact reliability of test results.

Section 8.2.6 includes added language applicable to plans for operation, maintenance and monitoring (OM&M) to be provided where mitigation is installed or found in buildings addressed by this standard.

Summary

Conscientious attention to ensure that radon measurement standards reflect the most current methods is imperative in maintaining quality, relevant editions of these standards. This bulletin serves as a ready reference to the most recent updates.

Future Revisions

Future revisions to this standard shall be facilitated per the AARST Consortium "Committee for Radon Measurement Standards" normal process, which includes public review. Any such revisions shall be followed by a technical bulletin to address changes.

Technical Bulletin: SGM-SF and SGM-MFLB

SGM-SF 2023 Soil Gas Mitigation Standards for Existing Homes

SGM-MFLB 2023 Soil Gas Mitigation Standards for Existing Multifamily, School, Commercial, and Mixed-Use Buildings (RMS-MF and RMS-LB consolidated and updated)

Objective

The purpose of this document is to provide concerned parties with an overview of recent revisions to the ANSI/AARST Standards, *Soil Gas Mitigation Standards for Existing Homes* (SGM-SF 2017), *Radon Mitigation Standards for Multifamily Buildings* (RMS-MF 2018) and *Radon Mitigation Standards for Schools and Large Buildings* (RMS-LB 2018). These standards were recently revised, with RMS-MF and RMS-LB consolidated into a single standard.

Scope

This Technical Bulletin addresses recent revisions of one ANSI/AARST mitigation standard and the revision and consolidation of two mitigation standards. This bulletin is relevant only to these latest revisions. It does not address revisions prior to the 2017-18 updates, nor does it address revisions to any other ANSI/AARST standards that may have been recently updated.

Background

The AARST Consortium “Committee for Radon and Soil Gas Mitigation Standards” is the body responsible for continual review and update of all ANSI/AARST standards. This committee is made up of industry, construction and regulatory professionals, and all proposed revisions are also subject to public review and comment. During the years since the 2018 publication of these standards, the committee has reviewed, revised, consolidated and finalized publication of the standards identified in this document.

Historical Overview

A provisional ANSI/AARST RMS-MF standard was published in 2013, with formal publication in 2014, along with the sibling standard RMS-LB, and was followed by publication of SGM-SF in 2017. The work entailed complete review of previously published mitigation standards (e.g. EPA RMS and ASTM E2121), where content addressed only mitigation in homes. As these new standards addressed both low-rise and high-rise buildings, more complicated enhancement was needed for: communication between all parties; diagnostics prior to design; separation between ASD content and content for sealing between soil and indoor air, because non-ASD methods often considered for large buildings still usually requires sealing. Non-ASD mitigation methods were addressed to provide minimums for diagnostics and design.

Due to the size of many larger buildings, details that can impact public health and the magnitude of cost for larger buildings procedures were elaborated on more explicitly than previously. Because one system can intentionally mitigate multiple dwellings or commercial units, or inadvertently impact such occupied

areas, a variety of related needs were addressed. Similarly, the need for quality control for work conducted and long-term risk management were also addressed.

Work on SGM-SF, RMS-MF and RMS-LB was conducted by different committees (consensus bodies), somewhat simultaneously, where each benefitted from work done on the other. Work began in 2019, with two complicated goals: (1) Harmonize content across the three mitigation standards, and (2) augment sentences to better comply with needs now required when standards are used for compliance assessment. The primary differences resulted in messages and requirements specific to residential versus commercial building needs. Both RMS-MF and RMS-LB standards were updated in 2018, and were the base documents used in the 2023 update and consolidation.

2023 Revisions

SGM-SF 2023 includes the complete harmonization of ANSI/AARST mitigation standards and editorial rendering more compliant with needs for compliance assessment. The focus included Sections 1 through 5 and 9 through 12. Most informational content was relocated to the Companion Guidance. Text relative to doing work on systems installed prior 2023, including when replacing fans, now required non-compliant exhausts and any non-compliant fan location be fixed. Quality control of design and installation practices has been elaborated on to require records of inspections prior to design and after installation along with quality control oversight at the jobsite.

Section 5 (System Design) now provides clearer qualities and details on initial inspections of jobsites. Diagnostics (e.g. PFE analysis) is required prior to all installations, except for radon mitigation in single family dwellings. The conditions of the building operating condition and seasonal conditions are to be documented for any diagnostic or performance check.

Section 7 (ASD System Installation) specifications for membrane materials placed over open soil for radon systems were relaxed to that required by EPA-RMS (i.e. 6 mil poly-membrane).

Section 9 (Post-mitigation Evaluation) now requires at least one PFE performance check measurement upon completion of installations. Additional post-mitigation evaluations for Vapor Intrusion systems were clarified.

Section 10 (Documentation) focuses on owner/occupied documentation with reference to times when a full OM&M manual is required. These situations include non-ASD designs and where maintenance of systems is to be performed by someone other than the owner/occupant.

Section 11 (Health and Safety) was completely rewritten, with focus on a safety management plan that includes safety training.

Section 12 (Non-ASD Systems and Methods) references SGM-MFLB (Soil Gas Mitigation Standards for Existing Multifamily, School, Commercial and Mixed-Use Buildings) for details.

The harmonization project from 2019 to 2023, included content in ANSI/AARST SGM-SF, RMS-MF and RMS-LB. The result revealed two things: (1) Most of the harmonized content was applicable for ANSI/AARST SGM-SF, and (2) Most of the content specific to RMS-MF (multifamily mitigation) was the same for RMS-LB (Schools and Large Buildings). As such, content in SGM-SF is referenced, rather than repeated in SGM-MFLB.

Elaborations retained within SGM-MFLB include pertinent differences in Section 5 (System Design) and Section 8 (All Systems and Methods) relative to collateral mitigation of multiple dwelling or units in a shared building).

Pertinent differences in Section 9 (Post-mitigation evaluations) are provided.

Section 10 (Documentation) focuses more on operation, maintenance and monitoring (OM&M) manuals relative to situations where maintenance of systems is to be done by someone other than an owner/occupant.

Section 12 (Non-ASD Systems and Methods) fully elaborates on Non-ASD system requirements that are more often associated with larger buildings, as an alternative or supplement to ASD mitigation methods.

Summary

Conscientious attention to ensure that mitigation standards reflect the most current methods is imperative in maintaining quality, relevant editions of these standards. This bulletin serves as a ready reference to the most recent updates.

Future Revisions

Future revisions to this standard shall be facilitated per the AARST Consortium “Committee for Radon and Soil Gas Mitigation Standards” normal process, which includes public review. Any such revisions shall be followed by a technical bulletin to address changes.

Certification Spotlight



Name:
Erin Napoletano

Location (city & state):
Seymour, CT

Title, Company:
Owner/Operator of Absolute Radon & Home Inspections, LLC.

What certification do you have?
Certified radon mitigation specialist (NRPP)

How long have you been working in radon?
I have been working in the radon field for just about 10 years now. I started in radon measurement in 2014, and became certified as a radon mitigation specialist the year after.

Describe your professional experience and how you got into radon mitigation/measurement?

I was a home inspector intern at the time I began my journey into the world of radon, and I wanted to add some professional licenses to my background. I quickly got my radon measurement certification, and worked hard running all the radon tests for the company I was employed by. When I saw that the mitigation systems were something that I knew I could install, I signed up for radon mitigation courses at Rutgers University, and went and stayed in NJ for a week while I completed my classes and training. I passed my exam to become certified on my first try, and when I came home, I called a lawyer, opened an LLC, and started my business as a side gig for extra income at first. Then, when Covid came around, my son started distance learning and I could not work for the home inspection company I was with anymore. So my side business, Absolute Radon, LLC got expanded and renamed Absolute Radon & Home Inspections, LLC, and I made the jump to be 100% self-employed. It was the best decision I ever made. I've been running my business full time as of September 1st, 2020, and I couldn't be happier!

Describe what a typical workday looks like.

A typical workday for me usually starts by driving all over the state to perform estimates for a radon mitigation system install, and dropping CRMs for clients that have scheduled a test. I am a 1-woman show, so I am answering all my phone calls for scheduling, which can run upwards of over 20+ calls a day. Then around 1pm, I arrive at my scheduled installation job for the day, and install a full active radon mitigation system. That typically takes anywhere from 1.5-3 hours, depending on how extensive the system is. After that, I head back to my office to complete all invoices and to download and create reports for any monitors I picked up from clients during the morning hours. The phone calls continue until around 7pm usually. Sometimes, I don't know how I do it. I definitely need an assistant. But for now, I get it all done myself.

What do you like about working in the radon profession?

Saving lives of course is my number 1 priority, and it feels great to help my clients not only remain safe from radon exposure, but also to feel comfortable living in their homes, knowing that my company installed a system that protects them from being exposed to high levels of radon gas.

Any challenges so far? If so, explain.

Well, being a woman in a male dominated industry is always difficult, but I have built a reputation over these past 10 years, so it isn't as challenging as it used to be. It's also difficult competing with the large corporations that can employ numerous people and complete many more installs than I am able to. But I think my number 1 challenge is running the entire business from answering the phone and scheduling jobs, to drilling through concrete slabs, to completing all testing and reports, all by myself. All while managing a household and being a single mom. The struggle is real!



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When did you first get certified?

I became a radon mitigation specialist in 2015.

Why did you get certified?

I got certified while I was working on my home inspector intern license because I saw so many homes that tested above 4.0pCi/L during the clients' inspection period. I knew that I could install the systems, being that I was already a handy person. So I looked up how to become certified, and never looked back.

Why NRPP?

Because they're the top dog when it comes to all things radon!

What benefit(s) did certification bring?

The ability to open my own company and be self-employed, a plethora of knowledge about radon and its impact on my community, and a feeling of joy that I could help people be healthy and live longer lives.

Any advice for people who are considering a career in radon?

Test the waters out to see if it's for you. If it's something you love doing, get certified and work to make yourself self-employed and financially secure!

Any advice for people who are considering certification?

Study hard! The tests are harder than you think! And ask other certified professionals questions. We can guide you to help make it a smooth and enjoyable journey to become a radon measurement professional/mitigation specialist!

Credentials and Standards

In the United States, 20 states have laws or regulations in place that require some form of proficiency qualifications for professionals doing radon work in the marketplace.

- Ten states require that radon work be performed by persons who have earned certification from an EPA-recognized private proficiency program (currently the National Radon Proficiency Program or National Radon Safety Board). Seven of the ten regulation-through-certification states also require a state-issued credential (license or certification).
- Ten states operate state-based licensing or certification systems, through which state regulations define state-specific terms and conditions under which individuals will secure, renew, and retain radon credentials. Most of these states require new applicants to pass the NRPP or NRSB exam.

The absence of proficiency requirements in the other 30 states allows unqualified personnel and fly-by-night contractors to conduct radon-related services and disregard standards without any accountability, and interferes with creating capacity to comply with national lending policy certification requirements. IEA’s model

state “Regulation through Certification” (RtC) legislation provides the critical components needed in a statute to save lives, leverage private proficiency infrastructure, optimize any state regulatory burden, and ensure a level playing field for professionals who are willing to adhere to current standards within a framework of accountability. Legislators and other advocates in MD MO NY TN and WI are working to enact RtC laws.

Adherence to standards is central to effective performance of radon measurement and soil gas mitigation, whether the individual is certified by a proficiency program (currently EPA-recognized - National Radon Proficiency Program or National Radon Safety Board) or works under a state license or certification. ANSI-AARST measurement and mitigation standards focus on essential uniform practices that deliver the greatest protection to building occupants, to facilitate the reliability of measurement and resilience of mitigation. Fourteen states require that radon professionals adhere to current EPA-recognized ANSI-AARST standards. Two states reference a blend of ANSI-AARST standards and other standards. Four states rely on older standards.

Credentials and Standards in Effect in the Regulated States				
State	Required Credential(s)		Measurement / Mitigation Standard(s)	
	Private Certification*	State License/ Certification	ANSI/AARST**	EPA, ASTM, other
California	X		All	
Colorado	X	X	All	
Connecticut	Mitigation	Mitigation	All (Mitigation)	
Florida		X	(update pending)	All
Illinois		X		All***
Indiana	X	X	All	
Iowa		X	Measurement	Mitigation
Kansas		X	All	
Kentucky	X	X	All	
Maine		X		All
Minnesota		X	All	
Nebraska		X	All	
New Hampshire	Mitigation		All (Mitigation)	
New Jersey		X	All	
Ohio		X		All***
Pennsylvania		X	Multifamily	Single Family
Rhode Island	X	X	All	
Utah	Mitigation	Mitigation	All (Mitigation)	
Virginia	X		All	
West Virginia	X	X	All	

*National Radon Proficiency Program or National Radon Safety Board ** American National Standards Institute/American Association of Radon Scientists and Technologists ***State regulation explicitly requires 100% ground contact testing in multifamily buildings

Remote Exam Proctoring

PILOT QUESTIONS ARE BEING ADDED TO NRPP EXAMS

NRPP will be adding pilot questions to its exams starting on October 1, 2024. Ten (10) pilot questions will be added to the Radon Measurement Field Technician (RMFT) and Radon Mitigation Installer (RMI) exams, increasing the total number of questions on each of those exams from 85 to 95. Fifteen (15) pilot questions will be added to the Radon Measurement Professional (RMP) and Radon Mitigation Specialist (RMS) exams, increasing the number of questions on those exams from 150 to 165.

Pilot questions are unscored questions, meaning the responses do not count for or against the test-takers' exam scores. Adding pilot questions to the exams will allow NRPP to "try out" newly written questions to determine if they are fair and can be used in the future as scored questions. The goal is to expand the "bank" of solid, well-written questions that NRPP's test developers can draw from to create new exams.

NRPP collects diagnostic information for each question and calculates statistics such as difficulty and discrimination. If a question doesn't perform well – for example, if nobody gets it correct – it is either revised and pilot tested again or removed from the bank so it won't be on an exam in the future. By knowing how questions perform before using them as scored questions, NRPP will enhance the quality of exams and help to ensure that the exams are fair and reliable indicators of the test-takers' knowledge. The addition of 15 questions to the RMP and RMS exams is not expected to greatly lengthen testing time; currently, test-takers rarely use the full three hours and, on average, complete the RMP and RMS exams in 90 minutes or less.



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Radon and Vapor Intrusion Symposium

Orlando

The symposium takes place in Orlando, FL at the Hyatt Regency Grand Cypress Resort. The Grand Cypress is a huge and beautiful property with spectacular outdoor areas, with a massive water park-style pool, including grottos. The outdoor cafe sits next to a private lake equipped with kayaks and paddle boats, walking paths, hidden firepits great for hanging out and meeting up with friends in the evenings.

Attendees are technicians in the field of radon and vapor intrusion measurement and remediation, states and tribes program leaders, and increasingly more environmental companies attend for training and to expand their forums. Indoor Environments 2024 is the definitive source for government agencies, advocates, educators, scientists, and companies sourcing field application-based needs seeking the leading indoor environments gathering annually.

80+ Speakers

50+ Exhibits

4 Days

7 Tracks

9 Short Courses



September 15 – 18, 2024

Hyatt Regency Grand Cypress

1 Grand Cypress Blvd. Orlando, FL 32836

RADON & VAPOR INTRUSION SYMPOSIUM



Orlando
2024

Agenda

SUNDAY, SEPTEMBER 15, 2024

SUNDAY C.E. SHORT COURSES

8:00 AM – 12:00 PM

ANSI/AARST MAH Mandatory Standard Overview Course

8:00 AM – 12:00 PM

Vapor Intrusion Mitigation Course

8:00 AM – 12:00 PM

The Rutgers Superlab; A Classroom Mitigation Diagnostics Video Watch Party

8:00 AM – 12:00 PM

Conducting Radon Surveys in Schools

1:00 PM – 5:00 PM

Review of Current ANSI-AARST SGM-SF Mitigation Standards

1:00 PM – 5:00 PM

Vapor Intrusion Mitigation Case Study Diagnostics Through Completion

1:00 – 3:00 PM

Social Media For Radon Small Business

1:00 – 3:00 PM

(con't) Conducting Radon Surveys in Schools

3:00 – 5:00 PM

MSQA Standards For Radon Measurement Professionals

3:00 – 5:00 PM

Codes and Standards Update for Installing Radon Reduction Systems in New Home Construction

AGENDA SUBJECT TO CHANGE. CHECK THE APP FOR THE LATEST UPDATES.

MONDAY, SEPTEMBER 16, 2024

GENERAL SESSION 8:00 AM – 10:00 AM (GRAND CYPRESS G,H)

8:00 AM	Welcome	Diane Swecker
8:05 AM	5 Keys to Your Success	Ari Gunzburg
9:00 AM	IEA: The Scope is Broad	Dave Hill, Aaron Friedrich
9:20 AM	CRM Performance at High Elevations	Bill Brodhead
9:40 AM	Surviving the Pour: Protection Considerations When Installing a Vapor Barrier Membrane for New Construction Buildings	Eric Lovenduski

BREAK & EXHIBITS 10:00 - 10:45 AM

RADON GENERAL SESSION 10:45 AM – 12:00 PM (GRAND CYPRESS G,H)			VAPOR INTRUSION 10:45 AM – 12:00 PM (GRAND CYPRESS A,B)		
10:45 AM	FHFA policy stakeholder education/monitoring update	Kyle Hoylman, Kimberly Steves	10:45 AM	Vapor Intrusion Site Characterization and Sampling Approaches	Lila Beckley
11:25 AM	Assessing Radon Exposure In Swedish Workplaces And Schools: Disparities, Criteria And Recommendations	Vanda Jakobová, Tryggve Rönnqvist	11:10 AM	VI and Preferential Pathways: Assessment Needs to Expand the Understanding Regarding Receptor Risks	Aaron Friedrich
11:30 AM	Standards Policies: An Update	Diane Swecker	11:35 AM	Evaluating The Effectiveness Of Indicator-Based Sampling Strategies For Vapor Intrusion Investigations	Chase Holton

LUNCH & EXHIBITS 12:00 – 1:30 PM

1:30 PM	Why are My Utility Bills so Much Higher After Mitigation?	Joshua Kerber, Chad Robinson	1:30 PM	The Effects of Sample Collection Time, Volume, and Probe Construction on Subslab Soil Gas Concentrations	Victoria Boyd
1:50 PM	The Need for Code Enforcement and Appendix F Update	Joshua Kerber, Jody Tropeano, Tommy Bowles			
2:20 PM	It Takes a Village: Partnering with State Comprehensive Cancer Control Programs for Radon Risk Reduction	Liz Orton	2:00 PM	Designing Commercial ASD Systems using PFE Testing and Piping Pressure Drop	Bill Brodhead
2:30 PM	Overview: Cancer Control Plans and Radon	Denise Bleiler, Daniel Tranter, Jane Malone	2:30 PM	Verifiable Protection From Contaminated Soil Gas/Vapor Intrusion While Scientific Understanding Evolves	Henry Schuver

BREAK, EXHIBITS, AND POSTERS 3:00 - 3:45 PM (EXHIBIT HALL)

POSTER: Onsite Radon In Water Measurement Method William Brodhead
 POSTER: Elevation Influence On Radon Monitor Measurement William Brodhead

3:45 PM	Sweden's Radon Management Practices - From EU-Law Regulatory Compliance to Local Enforcement	Jonte From	3:45 PM	Where Are We now? An Updated Summary of State Approaches to VI and the Use of Radon in VI Assessments	Catherine Regan
4:05 PM	2024 Survey	Jane Malone	4:20 PM	Navigating Vapor Intrusion and California Development - How to Optimize Sampling Practice to Carry Projects to Closure	Will Rice
4:25 PM	Effective Compliance / Enforcement Methods	Amy Roedl, Dan Tranter, Mark Ungerer	4:40 PM	State And Local Partnerships At Childcare Facilities On Vapor Intrusion – Testing & Notification	Jennifer Borski

ADJOURN 5:00 PM

TUESDAY, SEPTEMBER 17, 2024

PRACTICE & POLICY 8:00 AM – 10:00 AM (GRAND CYPRESS G,H)

8:00 AM	Tuesday Welcome and Housekeeping	Diane Swecker, Bill Long
8:05 AM	Professional Use of Vocabulary in the Soil Gas Industry	Tony McDonald, Chad Robinson
8:25 AM	Return on Investment in Radon	Tommy Bowles
8:35 AM	EPA's Radon Credentialing Criteria: An Update	Katrin Kral
8:55 AM	Regulation through Certification (RtC):IEA's Model Law	Jane Malone
9:15 AM	Mitigation Review: Do Credentials Matter?	Bob Coffee
9:35 AM	NRPP Update	Amy Roedl, Ashley Falco

BREAK, EXHIBITS, AND POSTERS 10:00 - 10:45 PM (EXHIBIT HALL)

PRACTICE & POLICY 10:45 AM - 12:00 PM (GRAND CYPRESS G,H)			SCIENCE & RESEARCH 10:45 AM - 12:00 PM (PALM)			STATES & TRIBES 10:45 AM - 12:00 PM (GRAND CYPRESS A,B)		
10:45 AM	Tips & Tricks: Operating a Radon Business in the Modern World	Wes Hodgden, Bruno Vassel	10:45 AM	Empirical Modeling Of Radon Diffusion Through Soil Using Field Study And An In-Lab Controlled Soil Column	Ashwin Ashok	10:45 AM	Increased Radon Testing with a Radon Detector Lending Program in Four Rural Public Libraries	Stacy Stanfier
11:15 AM	Mitigating Radon in Water	Dave Hill	11:05 AM	Under-Recognized Hazard Of Radon Exposure In Schools	Brian Yang	11:05 AM	Utah's School Curriculum for Radon	Eleanor Divver
11:45 AM	Utilizing Advanced Design and Manufacturing in the Radon Mitigation Industry	Shane Barr	11:25 AM	Efficiency Drop In Semiconductor Radon Monitors Due To Radon Absorption On Chamber Walls	Tryggve Rönqvist	11:25 AM	Strategies And Pilot Programs To Address Radon/ Indoor Environment Health Equity & Radon Environmental Justice For Minority And Underserved Communities	Nate Burden

LUNCH & EXHIBITS 12:00 – 1:30 PM

IEA ANNUAL MEETING 12:45 – 1:30 PM (PORTICO)

1:30 PM	Insurance And The Underwriter	Mike Zitek	1:30 PM	Radon by the Numbers (Part II: Comparative Biomarkers)	Mark Whitehead	1:30 PM	Consumer Grade Devices - Where We Currently Stand	Joshua Kerber
1:50 PM	Pricing Strategies	Brent Ulbert	1:50 PM	Characterizing Post-trial Carryover of Signal When Using E-PERM and Electret Radon Progeny Integrated Sampling Unit Sensors in a High Radon Cave Environment	Lawrence Welch			
2:15 PM	Online Marketing Mastery for Radon Professionals	Peter Ruchti	2:10 PM	Association Of Indoor Radon Levels And Lung Cancer Mortality In The Penn State Cancer Institute Catchment Area	Mia Ray	1:45 PM	Consumer Grade Devices Panel - Different Approaches and Perspectives	Alex Bahadori, Johna Boulafentis, Pam Warkentin, Joshua Kerber, Chad Robinson
2:40 PM	The MCI App is Where It's At - Tools to Expand your Radon Business	Dawn Coffee, Diane Swecker	2:30 PM	Underground Rock Types and Their Association with Indoor Air Radon Concentration in Georgia	Uttam Saha	2:30 PM	Consumer Grade Devices - Open Discussion and Next Steps	All

TUESDAY, SEPTEMBER 17, 2024 (continued)

PRACTICE & POLICY (GRAND CYPRESS G,H)			SCIENCE & RESEARCH (PALM)			STATES & TRIBES(GRAND CYPRESS A,B)		
3:45 PM	The Top 5 Ways To Fail A Mitigation Audit	Bob Coffee, Dawn Coffee	3:45 PM	Analyzing 33 Years of Florida's Radon Test Data	Mark Perry	3:45 PM	Tribal Radon Program Update: Keweenaw Bay Indian Community	Teal Sackett
4:05 PM	Stranger Things: Solving Radon Entry Mysteries	Panel: Merritt Gantt, Bob Anderson Moderator: Dallas Jones	4:05 PM	A Model of Radon and a New Radon Map: Predicting Household Indoor Radon Among the Universe of Single-Family Homes in the US	Lachlan Watkins	4:05 PM	Nevada's Impactful Approach to Radon Education	Christine Kelly
4:35 PM	The Devil Is in the Details: Avoiding Failures in Multifamily Measurement	Wes Hodgden, Winifred Chevront, Brian Hanson, Shawn Price	4:25 PM	High-resolution National Radon Maps Based on Massive Indoor Measurements in the United States	Longxiang Li	4:25 PM	'Conversations with a Doctor' Video Series	Melinda Enstrom
			4:40 PM	Radiological Dose And Risk Assessment Due To Tenorm In Nairobi City County, Kenya	Kenneth Oborah	4:45 PM	National Radon Poster and Video Contests Recap	Evan Foster

ADJOURN 5:00 PM



























WEDNESDAY, SEPTEMBER 18, 2024

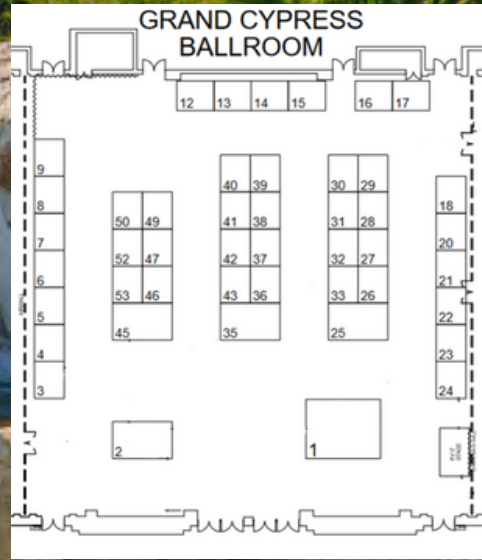
GENERAL SESSION 8:00 AM - 12:00 PM

8:00 AM	Welcome & Housekeeping	
8:05 AM	Lung Cancer Screening Saves Lives	Dr. Chivonne Harrigal
8:50 AM	TBA	TBA
9:10 AM	Legal Precedent for Property Owner Liability	David Gillay, Kyle Hoylman
9:25 AM	State Radon Policy: Work in Progress	Jane Malone
BREAK 9:55 - 10:10 AM		
10:10 AM	Canadian Radon Initiatives and New Initiative for Listing Professional and Consumer Grade Devices	Pam Warkentin, Brian Bjorndal
10:25 AM	OM&M: Emerging Standard	Dawn Oggier
10:45 AM	VI System Design vs. Installation ... What Could Go Wrong?	Tony McDonald
11:05 AM	Progress through the Lens of NRAP	Bill Long, Katrin Kral, Kimberly Steves, Kevin Stewart, Jane Malone

ADJOURN 12:00 PM

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 Alpha Energy Laboratories, Inc.	Alpha Energy Laboratories, Inc. 2501 Mayes Rd Ste 100 Carrrollton TX 75006-1378
 Angi	Angi 3601 Walnut St Ste 700 Denver CO 80205-4203
 Aranet	Aranet 3250 Quentin St Ste 128 Aurora CO 80011-1841
 Bowser-Morner, Inc.	Bowser-Morner, Inc. 4514 Taylorsville Rd Dayton OH 45424-2440
 Breeze	Breeze 698 Pro Med Ln Carmel IN 46032-5319
GOLD  CERTI	CERTI 3 Foster Ln Ste 102 Flemington NJ 08822-7256
 Citizens for Radioactive Radon Reduction, Inc.	Citizens for Radioactive Radon Reduction, Inc. 2461 Brookledge Rd Apt 33A Bridgeville PA 15017-1642
DURRIDGE  Durrige	Durrige 900 Technology Park Dr Billerica MA 01821-4167
BRONZE  Ecosense, Inc.	Ecosense, Inc. 1777 Hamilton Ave Ste 2180 San Jose CA 95125-5427
 Environmental Instruments Canada, Inc.	Environmental Instruments Canada, Inc. 135 Robin Crescent Saskatoon SA S7L6M3
 Eurofins Radon Testing Sweden	Eurofins Radon Testing Sweden Robertsviksgatan 6A Lulea SW 972 41
PLATINUM  Fantech, Inc.	Fantech, Inc. 10048 Industrial Blvd Lenexa KS 66215-1219
 Festa Radon Technologies Co	Festa Radon Technologies Co 47 Progress Ave Ste A Cranberry Twp PA 16066-3553
 Fitting Warehouse	Fitting Warehouse 2974 S 300 W South Salt Lake UT 84115-3405
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 Imdetek Co.	Imdetek Co. No.8-1, Tiangong 1 Lu, Qinhan New City, Xixian New Area Sh 712000
 ISI Building Products	ISI Building Products 401 Truck Haven Rd East Peoria IL 61611-1356
Lowe's MVPs  Lowe's	Lowe's 1000 Lowe's Blvd Mooresville NC 28117-8520
BRONZE  National Radon Program Services	National Radon Program Services 2323 Anderson Ave Ste 300 Manhattan KS 66502-2983
 National Radon Safety Board (NRSB)	National Radon Safety Board (NRSB) 14 Hayes St Elmsford NY 10523-2502
 Obar Systems	Obar Systems 2969 State Rt 23 Newfoundland NJ 07435-1467
GOLD  PDS Radon Supply	PDS Radon Supply 5720 Observation Ct Colorado Springs CO 80916-4740
 Quick Leads IIc	Quick Leads IIc 1418 Kingman Dr Saint Joseph MI 49085-9730
 Rad Elec Inc.	Rad Elec Inc. 5716 Industry Ln Ste A Frederick MD 21704-5204



 Radiation Safety Institute of Canada	Radiation Safety Institute of Canada 102-110 Research Drive Saskatoon SK S7N 3R3
 Radon Environmental Management Corp.	Radon Environmental Management Corp. POBOX 21208 RPO SQUARE VANCOUVER BC V2X7Y8
GOLD  Radon Supplies	Radon Supplies 48 Wakeman Rd New Canaan CT 06840-2212
DIAMOND  RadonAway	RadonAway 3 Saber Way Ward Hill MA 01835-8000
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 RSSI, Inc.	RSSI, Inc. 6312 Oakton St Morton Grove IL 60053-2723
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 Sump Pump Geeks	Sump Pump Geeks 269 Jacob St Seekonk MA 02771-1603
GOLD  SunRADON	SunRADON 1335 Gateway Dr Ste 2004 Melbourne FL 32901-2637
 Tattle Monitors LLC	Tattle Monitors LLC 16515 Excelsior Blvd Minnetonka MN 55345-5307
 The Ragnar Group	The Ragnar Group 19950 Dodd Blvd Ste 102 Lakeville MN 55044-6342
 Indoor Environments Association	Indoor Environments Association 527 N Justice Street Hendersonville, NC 28739
 National Radon Proficiency Program	National Radon Proficiency Program 527 N Justice Street Hendersonville, NC 28739
 Florida Health	Florida Health 4052 Bald Cypress Way Tallahassee, FL 32399-1712

REGISTER



Orlando Social Events



The Opening Reception: Sunday, Sept. 15th, 6-8 PM

This social event is a great opportunity to begin making new connections and greet friends.



Meals & Break Refreshments: Daily

All attendees can enjoy breakfasts (MTW), lunches (MT) and refreshments (MTW) during breaks. Plan a meal-time Meetup!



The Exhibit Hall

The Exhibit Hall is the hub for socializing. Join the fun on Monday and enter the Cornhole Tournament - playoffs at 5:00 PM!



Friends & Family Day Out: Wild Willy's Airboat Tour Tuesday, Sept. 17th 9-Noon

Discover the stunning nature of the Everglades on this tour. Purchase tickets before 5:00 PM Monday. Scan the QR code to purchase your ticket.



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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.

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Johna Boulafentis

Lapwai, Idaho
Environmental Specialist,
Nez Perce Tribe

IEA: How long have you been working in radon?

The Nez Perce Tribe received its first State Tribal Indoor Radon Grant (SIRG) in October 2020. I am the project lead for our radon activities, which include testing tribal housing and public outreach on the Nez Perce Reservation. I've worked for the Tribe since 2005 addressing indoor and

outdoor air quality issues, so radon is not new! Before SIRG funding, we provided limited outreach and when possible, collaborated with a state health partner during National Radon Action Month.

IEA: Describe your professional experience and what attracted you to radon to this work (your “ah-hah” moment):

Educating people about creating healthier indoor environments is a life passion for me. My job responsibilities have included non-toxic cleaning classes, asthma trigger reduction with families, and HEPA-filter air cleaner distributions. In Spring 2020, we wrapped up a multi-year study of indoor air quality and health in the homes of nearly 70 tribal elders that heat with firewood. Coincidentally, EPA Region 10 received additional funding that year and it seemed like the perfect timing to dive into radon testing and initiate a robust radon outreach campaign.

IEA: What does your typical workday look like?

My typical workday varies because of the multiple grants that fund my work. The bulk of my radon time occurs during the winter months. On my radon days, you may find me meeting with the Northwest Radon Poster Contest Workgroup, hosting an informational class, collaborating with nine public libraries on radon outreach, or going to tribal homes to install or collect radon tests. I also might be driving by a billboard that we cost-share with the Idaho Department of Health and Welfare.

One accomplishment that I'm proud of is that last September we provided a Radon Mitigation Short Course (1.5-day training) for the Tribe's Housing Authority and other nearby tribes in collaboration with Kansas State University. Classroom instruction plus walk-throughs of single-family and multi-family residences provided a great overview to prepare Housing staff for hiring certified mitigators and/or for taking an NRPP Mitigation Specialist course.

IEA: What do you like about working in the radon profession?

I enjoy radon work because it is centered around public health protection and action. I also appreciate the passion and helpfulness of the people in the radon field. Everyone I've met from the industry folks to agency staff to the organizations seems dedicated and hardworking.

IEA: What benefits does membership to Indoor Environments bring you?

Although I'm relatively new to Indoor Environments, I see many benefits to membership. So far, I have enjoyed the member discount for the Symposium registration along with the great learning opportunities at the event itself. Last year in Nashville, I took advantage of the free photography session for professional headshots (see photo for this article)! I also appreciate the free download of the various radon standards as I enjoy the ease of quickly referring to my own digital or hardcopy documents. Lastly, being a member connects me to other radon professionals to build my network of collaborators.

IEA: Do you have any advice for people who are considering becoming a member?

My advice for new folks is to reach out to Indoor Environments staff to learn more about membership benefits and how to connect with other radon professionals. There's a great community of people who are supportive and want you to succeed, so don't miss out on the opportunity.



3 Easy Ways to Get More Jobs Online

Peter Ruchti, Radon Marketing Specialist, and President, AdeptPlus Web Marketing

.....

Navigating the complex world of online marketing can be a daunting task. With countless strategies, contractors, and tools at your disposal, figuring out where to start can be overwhelming. Plus, the warmer months are notoriously slower for radon contractors, making it even more crucial to optimize your efforts.

The reality is: the fundamentals don't change. The tactics may change, and it can be hard to keep up with all of the updates.

One of Google's core themes is customer-centric marketing. Know your audience, speak to them well, and know how to properly get in front of them.

Here are the best three proven ways to get more jobs and keep your business thriving year-round.

1. Optimize Your Google My Business Profile

It's free to create a Business Profile on Google. Create a profile at no cost, and then manage your business using Google Search and Maps to start reaching more customers.

Your Google My Business profile can be one of the fastest and cost-free ways to rank higher on research results, with 1/3 of leads coming from the profile among many businesses.

If you search, "radon mitigation near me" on Google, you'll see the three or four listings in the map pack.

To optimize the profile, fill out as many of the details as possible including:

1. Select the correct categories (this is super important)
2. Add photos
3. Put target keywords in the business description
4. Add your services linked to your website
5. Add your logo

Reviews are also critically important. Implement a tool to automatically send a request for reviews after your team completes a job.

Pro Tip: Keep working at it until the Google My Business "Profile Strength" is 100%.

2. Leverage Search Engine Optimization for Long-Term Success

Search Engine Optimization (SEO) is a powerful source for driving organic traffic to your website. Optimize your site's structure, load speed, and mobile compatibility to improve user experience and search rankings. Consistent, valuable content will not only boost your visibility but also establish your authority in the industry.

The top priority for ranking higher should be quality content. Focus on creating high-quality, keyword-rich content that addresses common questions and concerns about radon. Here's a practical way to generate great content for your website:

1. Think about the top 5 questions that you get asked on every job. For example, "How long will it take for my radon levels to be reduced?"
2. Open your phone and start a new note. Use talk-to-type, and speak out loud, giving your full answer/response.
3. If you would like editing support, go to an Artificial Intelligence tool like ChatGPT and give it these instructions: "You are an expert content editor. I am giving you my article on how long it will take for radon levels to be reduced after installing a system. Please proofread it, suggest edits, and enrich it with the target SEO keywords."
4. Add your new article to your website

Pro Tip: Use ChatGPT to keep new ideas for topics and review your current website's content.

Member Spotlight

Name: Zan Jones

Location (city & state): Lombard, Illinois (that's where Radonova is – but I'm in Fort Worth, Texas)

Title, Company: Vice President, Sales and Marketing for Radonova

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

2 years

IEA: Describe your professional experience and what attracted you to this work (your ah-hah moment)

My professional experience "BR" (before radon) was in the construction and medical industries. I also owned my own business for 14 years. I was attracted to radon mainly out of curiosity because I'd never heard of it prior to my interview with Radonova. Now I tell everyone about it!

IEA: What do you like about working in the radon profession?:

First, the people - and then knowing I'm working in a profession that is saving lives.

IEA: What benefits does membership to Indoor Environments bring you?

Being relatively new to radon, IEA has helped me understand the industry – both the science and the business aspects of it. I've met incredibly gracious professionals who are generous with sharing their knowledge and experience.

IEA: Any advice for people who are considering becoming a member:

First, join. Second, get involved in a local chapter where you can network with fellow professionals and learn more about the industry and legislation opportunities.



3 Easy Ways to Get More Jobs Online *(continued from page 37)*

3. If You Invest in Google Ads, Ensure the Strategy is Strong

You've probably heard (or said), "I tried Google Ads, and it didn't work." Yes, a contractor can spend a bunch of money and get little to no results.

Success is possible, with the right approach.

The top 3 reports to evaluate to see if Google Ads was set up correctly are:

- Insights & Reports > Search Terms: see if the clicks that you purchased are accurate to your audience. If not, you're buying irrelevant keywords! Avoid targeting "radon" or "radon gas" keywords, as they are likely not looking for your services, but are doing research on the topic.
- Campaigns > Ads: check your click-through rate, which is the number of people who see an ad compared to those who click on an ad. You want this to be at least 7% or higher.
- Audiences, keywords, and content > Location: Ensure you are targeting the correct geographic area. Targeting clicks closer to home will result in less drive time.

Pro Tip: Set up a report to email you weekly with these results so you can keep a close eye on your results.

Author's Comments

As a Google Partner, my goal for this article is to provide practical, actionable tips that you can apply to your business today. I'd suggest starting with one strategy and working through it one step at a time.

STANDARDS

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CHAPTERS

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