Authorization Bill: Basic Citizen Protections

Radon Action Level - *Expand the authority under the Indoor Radon Abatement Act, Section 2663, to require that EPA develop and a radon action level that is a health-based threshold for preventive action.*

The Indoor Radon Abatement Act set the national goal of achieving indoor radon levels as low as the outdoor level, which is 0.5 picocuries per liter of air (pCi/L). IRAA instructed EPA in PL 100-551 (15 USC 2663) to publish a citizen's guide that includes a description of action levels indicating the health risk associated with different levels of exposure in buildings. EPA published the guide describing the action level of 4.0 pCi/L (148 bq/m3). The agency periodically updates other sections of the guide, but there is no process for updating the radon action level.

The current level of 4.0 pCi/L is not, and was not designed to be, a health-based threshold for preventive action. Indeed, among the reasons stated for this level is that it was the lowest level that was (1) reliably measurable by common portable equipment and (2) achievable through mitigation. Technological and mechanical development have rendered such rationales obsolete.

Any illusion about the protectiveness of 4.0 pCi/L is negated by the National Academy of Science's National Research Council's estimate that two-thirds of radon-induced lung cancers occur below this radon action level. The World Health Organization has established a recommended level for member countries' policies of 2.7 pCi/L. In 2018, the American Society of Heating, Refrigeration and Air Conditioning Engineers' revised consensus standard for green buildings (AHRAE 189.1) requires radon level below the WHO level; this standard is now embedded in the 2018 edition of the International Green Construction Code.

Radon Standard Relevant to Non-Nuclear Workplaces - *Clarify that the EPA action level shall apply to all buildings; and Revise OSHA's ionizing radiation regulations at 29 CFR 1910.1096 to add protection relevant to health effects and exposures in workplaces that do not have restricted areas.*

The Occupational Safety and Health Administration's ionizing radiation regulation (29 CFR 1910.1096) addresses the risk of ionizing radiation to workers in a "restricted area" where access is controlled by the employer for purpose of protecting individuals from exposure to radiation or radioactive materials. Such areas exist only where the employer possesses, uses, manufactures, or transfers sources of ionizing radiation, in locations such as health care facilities (e.g. radiology operations), research institutions, nuclear reactors, nuclear weapon production facilities, nuclear energy manufacturing settings, and the like. OSHA's exposure limit and testing and notification protocols only cover workplaces engaged in the course of business with ionizing radiation.

Radon exposure can occur in any workplace. The ground level and first floor of all workplaces, from elementary schools to retail stores, from day care centers to office buildings, are as likely to contain radon as a

home. The OSHA standard for “restricted areas” is unprotective for most other workplaces, because the exposure threshold (100 pCi/L) is many times higher than the indoor radon level known to cause cancer (2 pCi/L) and even the EPA action level (4 pCi/L). Most workplaces do not have personnel monitoring radiation levels daily and do not have extra room to restrict worker access to some areas some of the time. It is logistically impossible to expect non-nuclear workplaces to meet the OSHA radon standard, but action is needed to protect workers who spend 20-60 hours per week in buildings that may have high radon levels. Congress directed EPA to develop guidance for “buildings,” not just homes; indeed, while a traditional interpretation and perception may be that the EPA action level is for homes, it applies to all buildings.

Home Testing and Homebuyer Notification - *Require, prior to execution of a real estate sales contract, that a single-family homebuyer borrowing a loan secured by FHA, Federal National Mortgage Association (Fannie Mae), or the Federal Home Loan Mortgage Corporation (Freddie Mac), be provided with a signed warning statement about radon, the result of a radon test completed by a radon professional within the previous year, any other radon-related information about the property under consideration, and a radon information pamphlet.*

The time of home purchase is when many people focus on the quality of their home. The process, with loan applications, appraisals, inspections, multiple listings, and the likes gets buyers thinking about opportunities and risks. It is the ideal time to test for radon and fix any problem, yet there is no clear mechanism to inform buyers of this needed step and connect them to a means of testing before they make the purchase. Only one county in the US requires testing. Nine states require buyer notification with a warning statement, and other states are considering such practices. Notification will increase testing, which leads to identification and mitigation of high radon. A testing requirement will ensure testing occurs, allowing the buyer to present needed mitigation as a contingency or other point of negotiation with the seller. Awareness of a radon mitigation need is unlikely to interfere with completion of a purchase.

Tenant Notification and Rental Property Testing - *Require that tenants of all federally owned or assisted housing be provided with a warning statement about radon, disclosure of radon-related information about the dwelling unit, and a radon information pamphlet; phase in testing and mitigation for public and Indian housing, and other subsidized properties.*

In 1988 through PL 100-628, Congress directed HUD to develop and recommend “a policy for dealing with radon contamination that specifies programs for education, research, testing, and mitigation of radon hazards” in public and Indian housing and multifamily rental properties receiving project-based assistance or mortgage loan insurance. HUD implemented a comprehensive program affecting some properties receiving mortgage loan insurance. HUD also issued a letter to public housing authorities recommending that they consider radon testing and mitigation but HUD developed no program to educate occupants of public and Indian housing and multifamily rental properties receiving project-based assistance. This activity falls short of what was directed by Congress. This costs next to nothing and would begin to alert the vulnerable renter population to the risk of radon. HUD action will provide a model for the owners of privately-owned assisted properties without a HUD-insured mortgage.

Federally subsidized rental properties are required to meet housing quality standards at 24 CFR 982.401 which include a requirement that each dwelling unit be "free of pollutants in the air at levels that threaten the health of the occupants." Such support for indoor air would suggest a parallel requirement for radon testing and mitigation. Indeed, HUD enacted a requirement that tenants maintain a smoke-free environment throughout public housing properties, and, with CDC, initiated programs promoting smoke-free housing. The cumulative effect of these policies and practices would suggest a radon testing requirement and mitigation in any building where the radon level exceeds the action level.

Testing and Mitigation Information for School Districts - *Require the US Department of Education to have state education agencies, working with state radon programs, disseminate school-related consensus radon standards to local education agencies and recommend testing for radon (and mitigation if the radon level is above the EPA action level).*

Congress directed EPA in PL 100-551 (15 USC 2667) to conduct a study of schools' radon levels and provide school districts with technical guidance, data and information concerning methods of testing and remediation. The resultant National School Radon Survey estimated that 70,000 US classrooms had radon gas above the EPA action level, and that 19.3 % of all US schools had at least one classroom with a high level. Although a few states and some school districts have enacted testing requirements, there has been no concerted national effort to identify, test, and economically mitigate the high-risk classrooms. While federal funding is not likely available to render every classroom's radon level below the action level, a concerted national program is needed to build capacity by conveying radon knowledge and recommendations to school districts. EPA's initial technical protocols for schools been supplanted by ANSI-AARST consensus standards for measurement protocols and mitigation relevant to schools, but this information has not been disseminated to school districts on a national basis.

Health Savings and Flex Spending Account Payments for Radon Testing and Mitigation - *Add a statutory requirement to Section 213-1 of the Internal Revenue Code, or instruct IRS to make the needed technical change, to include radon testing and mitigation in the list of allowable expenses in IRS Publication 502, Medical and Dental Expenses.*

Some taxpayers set aside a portion of their income for future health needs. Section 213-1 of the Internal Revenue Code expressly allows "expenses incurred primarily for the prevention or alleviation of a physical or mental defect or disability." Current Internal Revenue Service (IRS) guidance does not allow funds from tax-favored health plans, such as Health Savings (HSA) and Flex Spending (FSA) Accounts, to be used for radon mitigation unless a doctor has already diagnosed an occupant with lung cancer. This approach prevents taxpayers from using their own funds to mitigate radon to prevent cancer. Allowing taxpayers' use of tax-favored health plan dollars for radon mitigation to prevent cancer would save literally tens of thousands of dollars and precious lives. Tax-deferred health savings account administrators should be able to communicate to plan participants that radon can be addressed with health savings and flex funds, and taxpayers should have the security of knowing that testing and mitigation expenses are allowable.