

August 6, 2021

The Honorable Sandra L. Thompson
Acting Director
Federal Housing Finance Agency
400 7th Street, SW
Washington, DC 20219

Re: FHFA Proposed Radon Testing Requirements

Dear Acting Director Thompson:

The undersigned national associations appreciated the opportunity to provide oral comments to the Federal Housing Finance Agency (“FHFA”) during the recent Multifamily Radon Listening Session. As a follow-up, we respectfully submit the following comments and recommendations for your consideration as you continue to review proposed radon testing protocols for Fannie Mae and Freddie Mac (the “Enterprises”) multifamily financing executions.

Our organizations represent a broad range of key industry stakeholders, including for-profit and non-profit multifamily property owners, lenders, developers, managers, housing cooperatives, investors, and housing agencies involved in providing rental and cooperative multifamily housing affordable to millions of American families regardless of their income.

The multifamily industry is dedicated to providing housing that is affordable, decent, and provides for the health and safety of its residents and their families. Importantly, we understand and accept our obligation to conduct the necessary environmental tests to evaluate the presence of potential environmental hazards such as radon and to undertake mitigation efforts should hazards be identified.

However, the industry continues to have issues and concerns with certain practical and procedural aspects of the adoption of the Environmental Protection Agency’s (EPA) Voluntary Consensus Standards for Radon Testing and Mitigation for all multifamily properties financed by the Enterprises.

We support the FHFA’s efforts to develop standards that are comprehensive, data-informed, readily executable by lenders and borrowers, and that can be effectively and consistently implemented, mitigated, and enforced. Our recommendations are based on an effort to find a prudent, responsible, and science-based approach that will allow for adequate environmental testing that will fully protect residents without also undermining the production and financing of much-needed multifamily housing.

We acknowledge the research conducted by the EPA and others showing long-term exposure to high levels of radon potentially increases lung cancer risk. However, we have reservations about the validity of some studies that have been cited as the basis for advancing an expanded radon testing protocol. We highlighted some of those concerns during the listening session and offer some additional observations within this letter.

KEY OBJECTIVES

The multifamily industry objectives are two-fold:

- First, to ensure that any changes to protocols protect the health and safety of our residents and are technically practical to implement; and
- Second, to ensure that the science of radon testing supports any changes in protocols.

To meet the objectives above, the implementation and impact of far-reaching changes to testing protocols must be formulated to ensure:

- Adequate testing capacity exists,
- Accurate and reproducible testing methodologies take into consideration the unique features of occupied multifamily properties,
- Any such testing prioritizes the safety of residents, and
- Protocols have minimal impact to the flow of capital to the multifamily industry.

Additionally, we believe that analyzing radon testing data collected from HUD since March 24, 2021, when the revised Multifamily Accelerated Processing (“MAP”) Guide radon testing became effective, would disclose useful and practical insights to help inform the process for the Enterprises. FHFA has a unique opportunity to benefit from the “lessons learned” from HUD’s execution of the revised radon testing protocol.

IMPLEMENTATION ISSUES/CHALLENGES

The multifamily industry and key stakeholders have significant reservations with the proposed testing protocols. We remain concerned that the implementation of such standards, which require a significant increase in testing, would not result in added safety to the residents and would come at the expense of affordable housing construction and preservation. Testing protocols should be calibrated to accurately and practically detect hazards.

In order to determine if changes to current Fannie Mae and Freddie Mac testing protocols should be made, *unbiased* and *independent* studies that are representative of different unit types and building configurations across different geographies and utilizing appropriate follow-up testing should be undertaken.

There are also a number of serious concerns regarding the implementation of the proposed testing protocols that relate to logistics, timing, and costs. Adoption of such an expansive change in current radon testing protocols requires a sophisticated and transparent review of these issues and a careful analysis of the implications *before* implementation.

Specifically, the current lack of radon testers across the country that are certified by the National Radon Proficiency Program or the National Radon Safety Board and are able to meet the requirements of the present standards is already a major problem, and that problem would only be exacerbated by the demands of enhanced testing requirements.

In fact, our data shows there are only 318 certified multifamily radon testers for the entire country. To put this in context, there are only 29 fully trained and qualified multifamily testers in all of Texas, California, and Florida. The industry is concerned that the normal timeframe to close a Fannie Mae or Freddie Mac multifamily loan, which is typically two to three months, could be unduly delayed due to the lack of qualified testers. This would constrict the much-needed financing and production of multifamily housing.

Prior to implementing any new radon testing standards, we urge FHFA to look to HUD’s ongoing implementation experience, since adopting their new test protocols, to help inform changes to the protocol for the Enterprises. In addition to leveraging the EPA’s longstanding work in this field, we would encourage the use of radon inspection data from HUD on the prevalence of radon in multifamily buildings when considering the appropriate balance between testing requirements (i.e., every unit vs. sampling) and its practical impacts on the financing and production of multifamily housing.

Over the next year, the industry will collect data to better understand the challenges and concerns that HUD is experiencing, and this data will be shared with FHFA. We strongly recommend that FHFA conduct the same research. That additional research would allow FHFA and its stakeholders to more reliably develop a successful program, mitigate risks, remove obstacles, and suggest any enhancements that would serve to improve the HUD process as well.

The industry cautions on implementing any testing standards that would effectively alter the speed and liquidity provided by Fannie Mae and Freddie Mac and undermine their ability to finance multifamily housing. In this regard, it is important for the FHFA to keep in mind the two fundamental differences between the HUD MAP program and the GSE program that are relevant here. First, the HUD program is much smaller and is 1/10th the size of the GSE's multifamily programs, which finance 1,600,000 units annually. Second, the timeline to close a GSE loan is typically 60 to 90 days, whereas the timeline to close a HUD loan, under normal circumstances, is typically 6 to 12 months. As a result, any negative impacts experienced under the HUD MAP radon testing protocol would be amplified if that protocol were applied to the GSEs.

As much as 40-50% of the Enterprises' business is for multifamily acquisitions. Delays posed by revised testing protocols would be particularly burdensome to sponsors acquiring properties who have limited due diligence and closing timeframes. Due to the significantly longer timing on HUD processing, very few acquisition loans are even made. We estimate it at less than 5% of their business.

To mitigate pipeline impacts, the industry also recommends that a process be developed to allow for post-closing testing should testing not be completed prior to closing.

Finally, adopting new standards and protocols should be an iterative process that could be refined after additional data has been collected, vetted, and peer reviewed. We will continue to formulate this process and will submit recommendations to FHFA as soon as practicable.

SCIENCE

FHFA should adopt regulations that are:

- Based on sound science;
- Developed with input from stakeholders in the regulated industries; and
- Able to adapt the referenced standard or code to account for local conditions.

We have found that even the most well-intentioned policies to set national environmental, energy, building, or safety standards can result in unintended negative consequences if those policies take a one-size-fits-all approach where one size does not in fact fit all.

Broad Stakeholder Input is Critical for Testing Protocols

We are particularly concerned that FHFA is considering the mandatory use of the EPA's Voluntary Consensus Standards for Radon Testing and Mitigation ("Consensus Standards") as a requirement for securing a Fannie Mae or Freddie Mac multifamily mortgage. Currently, the "Consensus Standards" reference protocols for measuring and mitigating radon in multifamily properties that were developed by American Association of Radon Scientists and Technologists (AARST). These standards were not developed in consultation with key multifamily industry stakeholders and were not proposed as formal regulations by FHFA in compliance with the Administrative Procedure Act.

INTERNATIONAL CODE COUNCIL

It is telling that a broad stakeholder code making body, the International Code Council (ICC), recently voted down new radon construction and testing protocols. These code amendments were introduced by AARST and they are similar, if not identical to the provisions that AARST has urged FHFA to adopt. The outcome of the deliberative, expert consideration that underlies the code adoption process should carefully be reviewed by FHFA, and it suggests that FHFA would be well-served to seek broad industry consensus on any new radon testing protocols.

In general, national model building codes for multifamily and single-family residential properties are developed through an open, transparent consensus process run by the International Code Council (ICC). State and local governments typically adopt these nationally recognized model codes, often amending them to reflect local construction practices, climate and geography. Standards referenced in these codes must be developed through a consensus process, must be written in mandatory language, and must not require the use of proprietary materials or a proprietary agency for quality control or testing.

The ICC's code development process has two key steps:

- New code proposals are first considered by a set of code development committees made up of stakeholders, including building code officials, engineers, and builders. One-third of the committee's members must be public safety officials. Committees are required to consider all views, objections, and the cost impact of all code change proposals. Committee members vote to approve the code change, make modifications to it, or vote against it.
- Following a public comment period, the final determination of which proposals will be incorporated in the next edition of the national model building codes is made by public safety officials who have no vested financial or personal interest in the outcome of proposed code changes.

The ICC is in the process of developing the 2024 codes. AARST submitted six different proposals, five of which would apply to multifamily buildings in some way:

- (1) In the International Building Code (IBC) require radon mitigation systems per AARST CC-1000 to be provided in all educational buildings.

- (2) In the IBC, require radon mitigation systems per AARST CC-1000 be provided in all apartment buildings.
- (3) In the IBC, require radon mitigation systems per AARST CC-1000 be provided in **all** buildings, except either Appendix F of the International Residential Code (IRC) or AARST RRNC shall be used for dwellings.
- (4) In the IBC require the same systems and compliance methods as Item #3, but as an appendix that a state or local government must opt to include at the time of adopting an updated code.
- (5) In the International Mechanical Code (IMC) require sub-slab soil exhaust systems to comply with AARST CC-1000.
- (6) In the International Property Maintenance Code (IPMC), require testing of existing multifamily buildings per AARST MAMF and (if necessary) installation of radon mitigation systems per AARST RMS.

AARST CC-1000 is a general design and installation standard for all buildings. MAMF is the testing standard for multifamily buildings, and RMS is a design and installation standard specifically for multifamily. RRNC is a design and installation standard for single-family houses.

The ICC code development committees charged with reviewing these proposals overwhelmingly rejected them. Comments from the relevant committees disapproving all six proposals included the fact they applied to Zone 3 areas of low radon potential in addition to the moderate and high-potential zones and the comments raised concerns the CC-1000 standard had suggestive and unenforceable language. The four IBC proposals were disapproved unanimously 14-0, as was the IMC proposal by an 11-0 vote. The one “outlier” was the property maintenance code proposal which was rejected by a 10-1 vote.

One concern with AARST MAMF is that it requires testing to be conducted by a “Qualified Measurement Professional,” defined as:

“An individual that has demonstrated a minimum degree of appropriate technical knowledge and skills both sufficient to place, retrieve and analyze (as applicable) radon detectors and to design, plan, and implement quality procedures when conducting radon measurements in multifamily buildings:

- a) as established in certification requirements of the National Radon Proficiency Program (NRPP) or the National Radon Safety Board (NRSB); and
- b) as required by local statute, state licensure or certification programs that evaluate individuals for radon specific technical knowledge and skills.”

This requirement for a tester certified by one of the two private organizations listed in Item (a) is excessively limiting, and more practical options are available. For instance, the radon testing requirement that was added in 2021 edition of the single-family International Residential Code allows radon testing to be performed either by the builder, by a registered design professional (e.g., an architect or engineer), or by an independent third party approved by the building official

or authority having jurisdiction. If FHFA proposes new radon requirements, similar options should be available for multifamily borrowers and lenders.

The EARTH Study

As noted during the listening session, there are very few studies evaluating the effect of radon's impact on multifamily properties, and there is one study that HUD cited in support of the revisions to the radon testing provisions under the MAP guide. The EARTH study was funded by a HUD grant, yet its process and conclusions have not undergone a peer review. FHFA has received a paper from the DUS Advisory Group, which engaged two radon testing organizations to review the EARTH study. The findings from Blackstone and BEST – who are highly experienced radon testing organizations – call into question the scope, process, and conclusions offered in the study.

Furthermore, during the listening session, Dr. Michael Fratantoni, MBA Chief Economist, offered his critiques regarding the EARTH study with respect to the data and approach. His view was that these shortcomings call into question the results of the study. Specific concerns regarding the EARTH study included the fact that the sample of eight thousand buildings is not random and is not representative. Without a valid statistical sample, these results simply cannot be relied upon as the factual basis for nationwide radon testing standards.

He also noted that the study does not ask the right question. The EARTH study's central question is how many units need to be tested to ensure with 95% confidence that they find the unit with radon above 4, assuming that every building has one unit with radon above 4. But it is not the case that every building has 1-unit with radon above 4. The Earth Study was working with a non-representative sample that ensures a higher percentage of buildings with at least one positive unit. In Dr. Fratantoni's view, the right question is how to focus scarce testing resources on those properties that are at higher risk. As a result, a properly grounded, risk-based approach is called for.

Moreover, the EARTH study also does not reflect industry practices in place today regarding what happens after a positive screening test. Both HUD and Freddie Mac require similar approaches. If the screening test is positive, then the results must be confirmed. If the second test confirms an elevated level of radon, then abatement measures must be put in place. *At the end of the day, the goal is not about maximizing the number of tests, it is about protecting the residents of these properties.*

Finally, we also engaged [Exponent](#), an engineering and scientific consulting firm, who for over 50 years has provided engineering, scientific, environmental, and health consulting services to corporations, insurance carriers, government agencies, law firms, and individuals. Exponent conducted a critical review of the study, "Evaluating and Assessing Radon Testing in Housing with multifamily federal financing (The EARTH Study)," by Kitto et al. (2021), as well as a predecessor article, "Evaluation of percentage-based radon testing requirements for federally funded multi-family housing projects," by Neri (2019). Exponent's analysis shows that the EARTH study conclusions were deeply flawed and did not support their recommendations. Exponent concluded that:

- *The radon data analyzed by the EARTH Study are not representative of nationwide multifamily housing units, which limits the generalizability of study findings.*

- *The EARTH Study and Neri analyses fail to consider and properly account for measurement error inherent to radon testing methods, including the risks and associated costs of making incorrect decisions.*
- *Health cost and risk assumptions are overly simplified, inadequately supported, and not demonstrably applicable to the national population of multifamily housing occupants.*

We have attached their report for your detailed review.

Balancing of factors

One last thought to consider was raised during the listening session. In some ways, radon testing is much like other safety protocols including automobile safety measures such as seat belts and collision airbags to reduce the risk of harm to motorists. However, we do not go so far as to also reduce the speed limit on all roads to 20 mph, as we balance safety factors against the risk. The same holds true for radon testing: it is not about simply testing 100% of the units. Other factors should help drive the decision, such as building design, geographic location, known radon risks, and duration of residency.

Much more due diligence is needed to ensure that the testing protocols intended to support the health and safety of residents are effective and have a practical benefit. More research is necessary to determine:

- The percentage of units that should be tested and how often testing should occur;
- Differences based on property location or asset class; and
- Appropriate documentation requirements.

To support new testing standards, this research must be peer-reviewed, thoroughly vetted and unbiased.

RECOMMENDATIONS

- *Allow adequate time to work with industry stakeholders to develop and adopt regulations that are based on sound science and adopt the appropriate standards to account for local conditions.*
- *Conduct additional research to determine the appropriate percentage of units that should be tested and at what frequency, based upon the property location and construction.*
- *Allow sufficient time to work with multifamily lending experts, qualified testers and environmental consultants to gather data to identify the appropriate number of qualified testers that will be necessary to efficiently handle the volume of any new testing protocol before it is adopted.*
- *Support testing protocols with a training program and funding to expand the number of fully qualified testers.*
- *Conduct independent peer reviews of that research to ensure that unbiased standards are adopted and implemented.*
- *Refrain from adopting private radon industry consensus standards that were not developed with appropriate levels of voting representation by multifamily developers and multifamily industry associations.*

CONCLUSION

The undersigned associations would like to thank the FHFA for providing a forum for the industry to express their concerns and recommendations. We look forward to continuing to engage with FHFA and industry stakeholders to address this important issue, with the common goal to balance the need to protect tenants' health and safety and to continue to provide much needed affordable housing.

If you have any questions or require additional information, please contact Mike Flood at mflood@mba.org or Dave Borsos at dborsos@nmhc.org.

We look forward to working with you on this important issue for the multifamily industry.

Sincerely,

Commercial Real Estate Finance Council
Council for Affordable and Rural Housing
Mortgage Bankers Association
National Apartment Association
National Affordable Housing Management Association
National Association of Home Builders
National Association of Housing Cooperatives
National Association of Realtors
National Leased Housing Association
National Multifamily Housing Council
The Real Estate Roundtable