U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-8000

ASSISTANT SECRETARY FOR HOUSING-
FEDERAL HOUSING COMMISSIONER

January 31, 2013

MORTGAGEE LETTER 2013-07

TO: All FHA-Approved Multifamily Mortgagees

SUBJECT: HUD Office of Multifamily Development Radon Policy

I. PURPOSE

The purpose of this Mortgagee Letter (ML) is to supplement the Environmental review requirements of Chapter 9 of the Multifamily Accelerated Processing (MAP) Guide by including a radon assessment.

II. LEGAL AUTHORITIES, ENVIRONMENTAL REQUIREMENTS AND BACKGROUNDS

All Federal agencies are required to comply with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) (NEPA), and the implementing procedures issued by the Council on Environmental Quality at 40 CFR Parts 1500-1508. HUD regulations implementing NEPA are contained in 24 CFR Part 50, "Protection and Enhancement of Environmental Quality." One of the tenets of HUD's Environmental policy is stated at § 50.3(i)(1) which requires that property proposed for HUD programs be free of "radioactive substances where [they] could affect the health and safety of occupants."

Recently HUD's Office of Healthy Homes and Lead Hazard Control (OHHLHC) participated on a team of Federal Agency representatives that drafted the Federal Radon Action Plan (the Plan) (see: http://www.epa.gov/radon/action_plan.html). The effort was led by the US Environmental Protection Agency (EPA). The Plan was released to the public by EPA at the National Healthy Homes conference in June 2011. One of the primary goals of the Plan is the incorporation of radon testing and mitigation into HUD programs.

The Office of Multifamily Development reviewed industry practices, including Lending programs of Fannie Mae and Freddie Mac, for the detection of radon and remediation. The resulting process presented in this document adapts industry best practices to Multifamily Housing Insurance Programs in such a manner as to improve the health and safety of housing residents while not creating excessive demands on project development.

III. HOUSING AND RADON

One common constituent of soil and rock is the unstable natural element uranium which decays into other elements, which themselves decay further. One of the decay products is radon, a colorless, odorless gas. Under certain natural conditions, the radon gas can enter surface soils and become part of the "soil gas" environment, which then can enter the air, including air inside of buildings. While the amount of uranium, as well as the likelihood that radon will become a soil gas that can be released into the air rather than be retained (adsorbed) on soil particles, varies depending on geologic conditions, there is no part of the country that is immune from its presence. When soil gas that contains radon enters a building, radon and its decay products are either directly inhaled, or attached to dust on walls, floors and in the air, which then can be inhaled. These decay products then undergo further decay, resulting in the release of subatomic alpha particles. This alpha particle radiation can cause mutations in lung tissue which can lead to lung cancer. The risk of contracting lung cancer from radon increases with an increase in the concentration of radon in the air that is breathed by building occupants. In fact, radon exposures are estimated to cause 21,000 lung cancer deaths each year in the United States.[1]

EPA recommends mitigation for residences with radon concentrations at or above 4 picocuries per liter of air (pCi/L).[2] The best way to mitigate radon is to prevent it from entering a building in the first place. Radon generally poses the greatest risk to occupants living at or below ground level. Occupants on the lower levels of structures are at risk of excess exposure if radon levels are elevated and these structures are not appropriately mitigated, or if they occupy new construction in areas with high radon that is not built using radon resistant construction methods.

The following requirements discuss the process for identification and mitigation of radon in new FHA Multifamily Insured mortgage applications.

IV. REQUIREMENTS

A. General

1. Radon Report.

a. The Radon Report shall be required for all MAP or TAP (Traditional Application Processing) applications, unless an exception listed in Section IV.A.3 applies.
b. The Radon Report shall be included in the pre-application, or application, as applicable, as an addendum to the Environmental Report required at Section 9.5 of the MAP Guide.
c. Contents. The Radon Report shall include the results of any testing

[1] EPA Assessment of Risks from Radon in Homes, June 2003, publication number EPA 402-R-03-003, *available at* http:www.epa.gov/radiation/docs/assessment/402-r-03-003.pdf.
[2] EPA. A Citizen's Guide To Radon, May 2012, publication number EPA 402/K-12/002, *available at* http://www.epa.gov/radon/pdfs/citizensguide.pdf.

performed, the details of any mitigation deemed necessary, and the timing of any such mitigation. An amended Radon Report must be issued if the testing and/or mitigation must occur after application according to the requirements below.

2. Radon Professional.

    a. All testing and mitigation must be performed under the supervision of a Radon Professional.
    b. Radon Certification/License of the Radon Professional is required as follows:
        1. Certification from either the American Association of Radon Scientists and Technologists (AARST) National Radon Proficiency Program (NRPP) or the National Radon Safety Board (NRSB), and
        2. Certification/License from the state in which the testing or mitigation work is being conducted if the state has this requirement.

3. Exception to the requirements of this Mortgagee Letter.

    a. A Radon Report is not required if a Radon Professional concludes that neither testing nor mitigation is necessary based on a physical inspection of the property, the characteristics of the buildings, and other valid justifications. An example of a valid justification is having only a garage on the surface level that is open to the air and is fully ventilated. Any such justifications as to why neither testing nor mitigation is necessary must be provided in the Environmental Report required at Section 9.5 of the MAP Guide.
    b. A Radon Report is not required for Section 223(f) refinance project applications that have a low radon risk. To determine whether the project's radon risk is low, the lender must first establish that the project is located in Zone 3 of the EPA Map of Radon Zones (available at: http://www.epa.gov/radon/zonemap.html). Then the lender must consult any published and readily available state or local radon potential data or maps to confirm the radon risk is low. If such information indicates a low radon risk, the lender must provide appropriate documentation in the Environmental Report that a Radon Report is not required.
    c. A Radon Report is not required for Section 223(a)(7) project applications.
    d. Applicants are encouraged to test for radon even if a Radon Report is not required per the exceptions in IV.A.3.a, b, or c. Any such testing must follow the Testing Protocols of IV.A.4 and Resident Notification protocols of IV.A.5 and must then be incorporated within a Radon Report as described within this Mortgagee Letter. If the results of such testing indicate levels of radon above the threshold for unacceptability, mitigation per this Mortgagee Letter is required, with the mitigation requirements for Section 223(a)(7) projects the same as those for Section 223(f) projects.

4. Testing Protocols.

    a. Radon testing must follow the protocols set by the American Association of Radon Scientists and Technologists, Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings (ANSI-AARST MAMF-2010, Section III (or similar section in the most recent addition) (available at http://www.aarst.org/bookstore.shtml).
        1. Exception: With reference to Section III.3.1 of ANSI-AARST MAMF-2010 (or similar section in the most recent edition), the minimum number of apartments to be tested shall be at least twenty-five percent of randomly selected ground level units.
    b. Threshold for unacceptability: 4.0 picocuries per liter (4.0 pCi/L) based on initial and any confirmatory testing, if performed.

5. Resident Notification.

    a. Testing. Residents of all new applications for Multifamily MAP and TAP programs shall be informed of forthcoming testing in the manner described in ANSI-AARST MAMF-2010, Section II.B and Section III.2.2.1 (or similar sections in the most recent edition).
    b. Mitigation. Residents shall be informed both prior to and after mitigation activities. In the case of new construction, incoming residents shall be informed of radon mitigation activities.

6. Mitigation Standards. The Radon Professional must assure that mitigation, when required, conforms to the following standards.

    a. Existing buildings: ASTM E 2121-11 (or most recent edition), Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Buildings (available at http://www.astm.org/Standards/E2121.htm).
    b. New construction: ASTM E 1465-08a (or most recent edition), Standard Practice for Radon Control Options for the Design and Construction of New Low-Rise Residential Buildings (available at http://www.astm.org/Standards/E1465.htm).

7. High-rise residential buildings. The ASTM mitigation standards at IV.A.6 apply to all high-rise applications subject to this policy. Note: HUD is aware that an ANSI-AARST Radon Mitigation Standard for Multifamily Buildings is being drafted. HUD will consider revising this Mortgagee Letter if and when that standard is issued.

8. Mitigation timing. For new construction and substantial rehabilitation properties, all mitigation, including follow-up testing, must be completed prior to Final Endorsement. Radon mitigation included as part of Section 223(f) project repairs must be completed as quickly as practicable, and in any event, no later than 12 months after Initial Endorsement.

9. Certificate of completion. A certificate of completion must be submitted and appended to the Radon Report once radon testing and/or mitigation are completed.

10. Cost estimate. Use detailed plans and specifications supplied by lender's architectural analyst as required by MAP Guide, Section 5.5, as a basis for the cost estimate. Estimates must reflect the general level of construction costs in the locality where construction takes place. Costs must be projected to the estimated construction start date.

B. Section 223(f) Refinancing.

1. All Section 223(f) refinancing projects located within high risk (Radon Zone 1) and medium risk (Radon Zone 2) zones must be tested for radon.

    a. Testing must be performed no earlier than 1 year prior to application submission.
    b. Exception: The applicant may elect to proceed directly to mitigation without testing.

2. Mitigation.

    a. Mitigation must follow ASTM E 2121-11(or most recent edition).
    b. If estimated costs exceed the allowable cost for the Section 223(f) program, the application cannot be approved but may be considered under the substantial rehabilitation program.

C. Substantial Rehabilitation and Conversions.
(Applies to all Radon Zones)

1. Testing prior to substantial rehabilitation or conversion.

    a. Early testing not feasible. For some proposals, such as a conversion of an existing structure from non-residential to residential, the building envelope may change to such an extent that early testing would not be appropriate and in some cases not possible. If this is the case, proceed directly to mitigation as discussed at IV.C.2.
    b. Early testing when feasible.
        1. Must be performed no earlier than 1 year prior to application submission.
        2. If test results are below the threshold, no mitigation is required.

3. If test results are at or above the threshold, mitigation must be built into the project design per IV.C.2a.

2. Mitigation.

    a. If mitigation is built into project design, it must be conducted in accordance with ASTM E 2121-11 (or most recent edition).
    b. If mitigation is not built into project design, after construction is complete but prior to Final Endorsement, radon testing must be conducted. If testing results are at or above the threshold, retrofit pursuant to ASTM E 2121-11 (or most recent edition) is required.

D. New Construction.

1. Radon resistant construction is required for all radon zones.

2. Radon Zone 1

    a. Construction Requirements. All new construction in Radon Zone 1 must meet all of the requirements of ASTM E 1465-08a (or most recent edition) for installation of passive systems.
    b. Post-construction testing is required prior to Final Endorsement, except as provided at IV.A.3. If testing results are at or above the threshold, conversion from a passive system to a fan-powered system pursuant to ASTM E 1465-08a (or most recent edition) is required.

3. Radon Zones 2 and 3

    a. Construction requirements.
        1. Gas permeable layer. The coarse aggregate permeable layer below the concrete slabs that would carry any radon away from the structure's interior must meet all of the requirements of ASTM E 1465-08a, Section 6.4 (or similar section in the most recent edition).
        2. Ground cover. The concrete slabs and plastic membranes that seal the top of the gas permeable layer must meet all of the requirements of ASTM E 1465-08a, Section 6.2 (or similar section in the most recent edition).
        3. Foundation walls. Foundation walls must meet all of the requirements of ASTM E 1465-08a, Section 6.3 (or similar section in the most recent edition).

    b. Post-construction testing is required, except as provided at IV.A.3.
        1. Radon testing must be performed after construction is complete, but prior to Final Endorsement.
        2. If testing results are at or above the threshold, retrofit based on

ASTM E 2121-11 (or most recent edition) is required, with installation of a passive system. If testing results remain above

threshold, a fan-powered system pursuant to ASTM E 1465-08a (or most recent edition) is required.

This Mortgagee Letter is effective for Firm Commitment or Pre-application packages submitted after 120 days from the date of publication.

If there are any questions regarding this Mortgagee Letter, please contact Thomas Goade at (202) 402-2727. Persons with hearing or speech impairments may access this number via TDD/TTY by calling 1-800-877-8339.

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Federal Housing Commissioner