MEMORANDUM: Multifamily FHA MAP Lenders
HUD Multifamily Production Staff

FROM: Patricia Burke, Acting Director, Office of Multifamily Production, HTHE

SUBJECT: Current Radon Standards for Testing and New Construction

A. Radon Standards

Current radon safe testing and building standards for all projects are required by Section 9.1 of the MAP Guide.

ANSI-AARST MAMF 2017

On March 1, 2017, the American Association of Radon Scientists and Technologists published an update to the Protocol for Conducting Radon and Radon Decay Product Measurements in existing Multifamily buildings (ANSI-AARST MAMF 2017 or MAMF 2017). The MAP Guide requires radon testing to follow the latest edition, so MAMF 2017 is required of participants.

The MAP Guide permits testing of 25% of randomly selected ground level units/rooms in each building instead of the 100% required by the MAMF 2017 standard. All other testing requirements in the MAMF 2017 standard, including upper floor testing, apply (See MAP 9.5.C.2.d). New to the MAMF 2017 standard is a requirement that if the initial testing did not include all ground level units/rooms and elevated radon is found in one or more of those units/rooms tested, a full testing assessment must include all ground level units/rooms plus 10% of the upper floor units in all buildings included in the project. As an alternative to a full testing assessment, all ground level units/rooms in all buildings included in the project must be mitigated. This is a change from the reference to the previous standard in the MAP Guide, which did not specify a full testing assessment in all buildings if elevated radon levels were determined to exist and did not provide the option of a full testing assessment in lieu of mitigation of all ground level units/rooms.

All radon mitigation must follow the appropriate standard (see MAP 9.5.C)
On March 1, 2017, ANSI-AARST also published the Soil Gas Control Systems in New
Construction of Buildings Standard (CC-1000 2017), the first such standard ever published on new
construction for buildings larger or more complex than one- and two-family dwellings. On
February 1, 2018, the standard was slightly updated to the CC-1000 2018 version. The CC-1000
2018 standard is the appropriate new construction radon mitigation standard for most multifamily
developments. In a related action, ASTM withdrew the standard currently cited in the MAP
Guide: ASTM E-1465-08a Standard Practice for Radon Control Options for the Design and
Construction of New Low-Rise Residential Buildings. However, another standard, AARST/ANSI
CCAH 2013, Reducing Radon in New Construction of One- & Two-Family Dwellings and
Townhouses, remains in effect for such buildings. HUD requires reliance on the most recent
standard or guidance document in force, and therefore multifamily program participants must use
the new CC-1000 2018 standard for all multifamily buildings except those consisting of one- and
two-family dwellings, in which case the AARST/ANSI CCAH-2013 standard applies. The
references to ASTM E-1465-08a in section 9.5.C no longer apply.

B. New Construction

The language in Section 9.5.C.2.a requiring a radon report at either the pre-application or the
Firm Commitment application applies only to reporting radon testing conclusions for existing
buildings as part of a substantial rehabilitation or refinance application. For new construction
projects, preconstruction testing is not possible. Accordingly, a report by a radon professional is
required only after testing has been conducted at completion of construction and prior to final
endorsement in accordance with Section 9.5.C of the MAP Guide. Applications must include the
radon zone and a description of the radon mitigation system in the architectural plans, as HUD relies
on the project architect to design and incorporate any required radon mitigation system. HUD
requires the architect to seek technical advice from a radon specialist should the architect believe it
necessary in their professional judgment or if it is required by the relevant mitigation standard.

Most existing buildings proposed for substantial rehabilitation or conversion to multifamily
must conduct early testing and submit a radon report at pre-application or Firm Commitment
application. Certain proposals, such as a conversion of an existing building from non-residential to
residential, change the building envelope to such an extent that early testing would not be
appropriate. In those cases, the project does not need to submit a radon report at pre-application or
application but must follow the guidance at 9.5.C.4. Applications must include the radon zone and
an explanation of why early testing is not feasible.

C. Implementation

This guidance contained in this letter is effective immediately. If there are any questions
please contact Thomas A. Bernaciak, Technical Support Director, Office of Multifamily Production
at (202) 402-3242 or Thomas.A.Bernaciak@hud.gov. Persons with hearing or speech impairments
may access this number via TDD/TTY by calling 1.877.TDD.2HUD 1-877-833-2483.