

KHC's Radon Policy – April 2024

This policy outlines Kentucky Housing Corporation's (KHC) procedures to ensure grantee's performing environmental reviews comply with HUD's recently released [CPD Notice- 23-103: Departmental Policy for Addressing Radon in the Environmental Review Process](#). This policy is effective April 11, 2024 and applies to HOME and NHTF. Note, if your local community already has requirement regarding radon, contact KHC's Environmental Review Technical Administrator at joberlin@kyhousing.org.

What is Radon?

Radon is a naturally occurring colorless, odorless, and tasteless radioactive gas that comes from the natural radioactive decay of uranium. Radon itself then decays into radioactive decay products that can be inhaled and cause damage to the lungs and stomach tissue which could cause cancer.

What projects are subject to radon considerations?

KHC developed these strategies to assist grantees with the necessary consideration of radon in the site contamination analysis required under 24 CFR Parts 58.5(i). Not all projects are subject to radon compliance such as those HUD declares as exempt from Environmental Review per 24 CFR 58.34(a) and those categorically excluded not subject to the Federal laws and authorities per 24 CFR 58.35(b).

KHC encourages all entities to explore the [UK College of Nursing's Bridging Research Efforts and Advocacy Toward Healthy Environments \(BREATHE\) Radon](#) information and data for preliminary research and planning. One of the features of the site is Radon Data by County that you can utilize to familiarize yourself with the potential Radon risk in your service area. This data can assist developers with determining whether the project site is located in an area that has average radon levels at or above 4 pCi/L. After April 11th, 2024, if data (research for new construction) or actual radon testing (in the case of rehabilitation of structures) determines the radon levels are or may be above 4 pCi/L than a radon mitigation plan must be documented and implemented. In instances where radon testing will be conducted but cannot be conducted until after the environmental review record is certified – such as with new construction – then the initial mitigation documentation would not include a radon evaluation but must include a condition for post-construction radon testing followed by mitigation if needed.

Single-Family Rehabilitation:

PREFERRED RADON TESTING METHOD: Preferred method is the American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) radon testing standards for single-family buildings. The ANSI/AARST standard describes how to conduct testing, interpret test results, and draft a Radon Test Report to document the process for the building owner and to use for the Environmental Review Record (ERR). The ANSI/AARST standards can be viewed online for free and are intended to be implemented by licensed radon professionals. You can find a list of trained experts in Kentucky [here](#).

ALTERNATIVE RADON TESTING METHOD: If there are no certified radon professionals in your area, then a do-it-yourself (DIY) radon test kit may be used to measure radon levels in single-family dwelling units. You can request free [DIY radon tests kits](#) from your local health department or from the [Kentucky Radon Program](#). DIY radon kits can also be purchased online

or at hardware or home improvement stores. Test devices must be approved by the National Radon Proficiency Program (NRPP) or the National Radon Safety Board (NRSB) and test results must be analyzed by a certified laboratory. All test instructions as specified by the manufacturer must be followed exactly. Note: The ANSI/AARST standards for testing single-family housing are excellent resources for detailed instructions about conducting the radon test.

RESULTS:

If testing demonstrates that radon levels within the building are below 4 pCi/L mitigation is not required. Environmental review preparers can simply document the test results in the Environmental Review Record (ERR). Currently, HUD requires that you utilize the existing fields in the Contamination and Toxic Substances HEROS screen.

If testing demonstrates that radon levels are at or above 4 pCi/L than you must incorporate more mitigation measures until levels are below 4 pCi/L and document them in the ERR.

RADON MITIGATION: When radon testing determines indoor radon levels are at or above 4 pCi/L, then a mitigation plan must be created that:

- identifies the radon level at initial testing,
- considers the risk to occupants' health,
- describes the radon reduction system that will be installed,
- establishes an ongoing maintenance plan,
- includes a reasonable timeframe for implementation, and
- requires post-installation testing.

Documenting the Environmental Review Record (ERR): In HEROS, document the radon evaluation and mitigation plan, if required, in the Contamination and Toxic Substances Compliance Determination screen and upload supporting documentation. Acceptable method to document DIY testing must include:

- the test device (type),
- the time period of testing,
- the test conditions (HVAC system off, outside temperature),
- the test results, and
- any other conditions relevant to test conditions.

Single-Family New Construction:

NEW DESIGN STANDARDS: To ensure that all KHC-funded single family new construction units are radon mitigation ready, KHC's Design and Construction Review division has implemented the following updates to the Minimum Design Standards:

Radon Reduction: A passive radon reduction venting system is required for all units.

- a) The radon vent pipe shall pass through a heated portion of the structure and an accessible attic space or chase which will allow adequate working space to possibly install an inline fan.
- b) Electrical provisions shall be roughed in, in an accessible attic or chase, for possible future installation of an inline fan.

- c) All units must receive radon testing conducted post construction but before occupancy. Please consult KHC's Radon Policy for acceptable test methods.
- a. If testing shows 4 picocuries per liter (pCi/L) or more, then mitigation measures shall be completed according to the most current version of ANSI/AARST CCAH (American National Standards Institute/American Association of Radon Scientists and Technologists CCAH Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses).

PREFERRED RADON TESTING METHOD: Use the [UK College of Nursing's Bridging Research Efforts and Advocacy Toward Healthy Environments \(BREATHE\) Radon](#) information Radon Data by County to determine whether the project site is located in an area that has average radon levels at or above 4 pCi/L.

Post construction testing must occur. Preferred method is the American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) radon testing standards for single-family buildings. The ANSI/AARST standard describes how to conduct testing, interpret test results, and draft a Radon Test Report to document the process for the building owner and to use for the ERR. The ANSI/AARST standards can be viewed online for free and are intended to be implemented by licensed radon professionals. You can find a list of trained experts in Kentucky [here](#).

ALTERNATIVE RADON TESTING METHOD: If there are no certified radon professionals in your area then do-it-yourself (DIY) radon test kits may be used to measure radon levels in single-family dwelling units. You can request free [DIY radon tests kits](#) from your local health department or if they do not participate you can request a free kit from the [Kentucky Radon Program](#). They can also be purchased online or at your local hardware store or home improvement store. Note: The ANSI/AARST standard for testing single-family housing are excellent resources for detailed instructions about conducting the radon test. Test devices must be approved by the National Radon Proficiency Program (NRPP) or the National Radon Safety Board (NRSB) and test results must be analyzed by a certified laboratory. All test instructions as specified by the manufacturer must be followed exactly.

RADON MITIGATION: When radon testing determines indoor radon levels are at or above 4 pCi/L then a mitigation plan must be created. It must:

- identify the radon level at initial testing
- consider the risk to occupants' health
- describe the radon reduction system that will be installed
- establish an ongoing maintenance plan
- include a reasonable timeframe for implementation
- require post-installation testing.

Documenting the ERR:

- Pre-Construction: In HEROS, in the Contamination and Toxic Substances factor Compliance Determination screen include a condition for post-construction radon testing followed by

mitigation if necessary. Note, the environmental preparer must update the ERR with the radon evaluation and proof of any required mitigation when complete.

- ***Post-Construction:*** In HEROS, document the radon evaluation and mitigation plan, if necessary, in the Contamination and Toxic Substances factor Compliance Determination screen and upload supporting documentation. Acceptable method to document DIY testing must include:
 - the test device (type)
 - time period of test
 - test conditions (HVAC system off, outside temperature)
 - test results
 - other conditions relevant to test conditions

If testing demonstrates that radon levels within the building are below 4 pCi/L mitigation is not required. Environmental review prepares can simply document the test results in the ERR.

If testing demonstrates that radon levels are at or above 4 pCi/L than you must incorporate more mitigation measures until levels are below 4 pCi/L and document them in the ERR.

Multi-Family Rehabilitation and New Construction:

The American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) MA-MFLB-2023 radon testing standards for multi-family buildings, schools, and large buildings must be utilized. The ANSI/AARST MA-MFLB-2023 standard describes how to conduct testing, interpret test results, and draft a Radon Test Report to document the process for the building owner and to documentation for the ERR. The ANSI/AARST MA-MFLB-2023 standards can be viewed online for free and are intended to be implemented by licensed radon professionals. You can find a list of trained experts in Kentucky [here](#).

Mitigation: When radon testing determines indoor radon levels are at or above 4 pCi/L, then a mitigation plan must be created, that:

- identifies the radon level at initial testing,
- considers the risk to occupants' health,
- describes the radon reduction system that will be installed,
- establishes an ongoing maintenance plan,
- includes a reasonable timeframe for implementation, and
- requires post-installation testing by a licensed radon professional.

Documenting the ERR: In HEROS, document the radon evaluation and if necessary, the radon mitigation plan, if necessary, in the Contamination and Toxic Substances factor Compliance Determination screen and upload all supporting documentation.

If testing demonstrates that radon levels within the building are below 4 pCi/L, mitigation is not required. Environmental review preparers can simply document the test results in the ERR.

If testing demonstrates that radon levels are at or above 4 pCi/L, then incorporate more mitigation measures until levels are below 4 pCi/L and document them in the ERR.