

Kansas Department of Health and Environment
Bureau of Environmental Health

**RADON CERTIFICATION
REGULATORY IMPACT STATEMENT**

Pursuant to K.S.A 2010 Supp. 77-416

PROPOSED NEW REGULATIONS
K.A.R. 28-35-600 through 28-35-609

October 3, 2011

Background of Proposed Regulations

More than 1,800 new cases of lung cancer are diagnosed every year in Kansas (Kansas Cancer Registry 2006 data). The American Lung Association estimates that approximately 12% of new lung cancer cases, or over 200 new cases each year in Kansas, can be attributed to indoor radon gas exposure. Kansas Radon Program data shows over 41% of the 50,182 radon measurements conducted in Kansas had levels of radon gas exceeding the EPA established action level guideline of four picocuries/liter. As of 2010, the average observed residential radon level in Kansas was 4.8 pCi/L and the maximum reported radon level was 260 pCi/L. Fifty percent of homes in some Johnson County communities have indoor radon levels greater than four pCi/L (Kansas Radon Program data).

Prior to the adoption of the Kansas Radon Certification Law, technicians in Kansas who perform radon measurement and mitigation services were not required to obtain any training and certification, or to demonstrate any qualification for performing these services. They were also not required to share their radon testing and mitigation data with the Kansas Radon Program. It is critical that radon technicians in Kansas receive training and certification because radon gas is a known human Class A carcinogen. It is colorless, odorless, tasteless, and otherwise undetectable except with specialized equipment or test kits. Because of this, it is a risk about which people may be unaware. Without a radon test, Kansas residents have no other way of knowing if they may be living in a home where they are breathing dangerous radon levels. For a test to be accurate, a radon measurement technician must follow established testing standards and protocols. If a radon mitigation technician installs a mitigation system incorrectly, the faulty system can actually increase radon levels or introduce carbon monoxide into homes.

The Radon Awareness Law (HB 2772) passed in 2008 and went into effect in 2009. This law requires information on radon testing to be included on all Kansas residential real estate contracts for one or two family dwellings. The department anticipates further increases in homeowners and other occupants seeking radon measurement and mitigation services because of the Radon Awareness Law. As the demand for radon services expands due to increased public awareness, there is an even greater need to ensure safe and consistent radon measurement and mitigation practices.

The Radon Certification Law (SB531) passed in 2010 went into effect on July 1, 2011. This law requires persons who measure radon levels and perform radon mitigation services to be certified by the department, and it authorizes the department to promulgate regulations to implement the law. The proposed regulations implement the Radon Certification Law and establish: the certification program for persons performing radon testing and mitigation; and rules and regulations for the implementation and administration of the program.

Summary of New Regulations

New regulation: K.A.R. 28-35-600. Definitions

Regulation 28-35-600 defines specific terms used throughout the regulations in this package.

New regulation: K.A.R. 28-35-601. General Provisions

Regulation 28-35-601 was written to specify general requirements applicable to all persons wishing to be certified for radon measurement, mitigation or laboratory services. The regulation establishes grounds for denying a certification, sets the term of certification at 24 months and establishes procedures for seeking relief from the regulations.

New regulation: K.A.R. 28-35-602. Fees

Regulation 28-35-602 establishes the fees for initial and renewal certification as well as late fees and fees for returned checks or insufficient funds. Certification fees are non-refundable.

New regulations: K.A.R. 28-35-603 through 28-35-605. Certification Requirements

Regulations 28-35-603, 28-35-604 and 28-35-605 establish the requirements for initial certification, renewal and continuing education for radon measurement technicians and radon mitigation technicians.

New regulations: K.A.R. 28-35-606 and 28-35-607. Radon Business Requirements

Regulations 28-35-606 and 28-35-607 establish the requirements for radon measurement businesses and radon mitigation businesses respectively. These businesses are required to employ or retain as a consultant either a certified radon measurement or mitigation technician. Services provided by the business are required to be directly supervised by a certified person.

New regulations: K.A.R. 28-35-608. Reciprocity

Regulation 28-35-608 provides for the reciprocal recognition of another state or federal certification provided the department finds the certification requirements are at least as stringent as those of the Kansas Radon Certification Law.

New regulations: K.A.R. 28-35-609. Renewal of certification

Regulation 28-35-609 specifies the requirements for renewing certifications for radon measurement technicians, radon mitigation technicians and radon measurement laboratories. Certifications may be renewed for a 24-month period.

I. Environmental Benefit Statement

1. Need for proposed amendments and environmental benefit likely to accrue.

(a) Need

The department has two major objectives for implementing the proposed regulations. First, the proposed regulations implement the Radon Certification Law which establishes a radon proficiency certification program and empowers the department to document and track data about radon in Kansas. The certification program and its data tracking component will ensure that consumers have access to safe, consistent radon information and services from better trained technicians. Though no federal radon requirements exist, the proposed regulations will create greater consistency between Kansas and other states that currently have radon programs in place.

Second, the Radon Certification Law also establishes a fee fund for the administration of the certification program. The proposed regulations establish the fees. The department currently receives grant funds from EPA for the training of radon measurement and mitigation technicians and the collection and analysis of Kansas radon testing and mitigation data; however, EPA grant funds cannot be used in conjunction with the administration of a certification program.

(b) Environmental Benefit

The proposed regulations fall into two broad categories. The first category encompasses regulations establishing a radon certification program to ensure that radon technicians in Kansas are trained in the current best practices. The second category encompasses regulations to collect radon testing and mitigation data from technicians. Both categories of regulations serve the overall purpose of protecting home environments from known human carcinogens, promoting public health benefits associated with radon awareness, and preventing new lung cancer cases attributable to radon in Kansas.

2. When applicable, a summary of the research indicating the level of risk to the public health or the environment being removed or controlled by the proposed rules and regulations or amendment.

The proposed regulations enforce the Radon Certification Law which establishes criteria for radon proficiency certification and radon data collection in Kansas and a fee fund for the administration of the radon certification program. The regulations do not introduce enforceable limits on indoor radon because no federal law requires such enforcement. However, EPA developed an action level guideline of four picocuries/liter for indoor radon concentrations to establish the level at which it recommends radon mitigation occur. Because radon is a known class A human carcinogen and the second leading cause of lung cancer, EPA believes that any exposure to radon carries some risk and no level of radon exposure is safe. These risks associated with radon exposure have also been determined through a consensus process of state radiation control programs and suggested state regulations have been published by the Conference of Radiation Control Program Directors.

- 3. If specific containments are to be controlled by the amendment, a description indicating the level at which the contaminants are considered harmful according to current available research.**

The proposed regulations do not introduce standards or limitations on radon indoor air concentrations. However, the proposed regulations do require radon measurement and mitigation technicians to take courses on best practices for radon services. Current practices utilize the EPA action level guideline of four picocuries/liter as a measure recommending further testing or mitigation, and they acknowledge that it is difficult to decrease indoor radon levels below two pCi/L.

II. Economic Impact Statement

- 1. Are the amendments mandated by federal law as a requirement for participating in or implementing a federally subsidized or assisted program?**

An effective radon proficiency certification program is not mandated under federal law, and the department is not required by federal law to collect data about radon testing and mitigation. However, EPA, the National Environmental Health Association, and the National Radon Safety Board issue non-mandatory radon proficiency certifications with guidelines similar to those proposed in these regulations.

- 2. Do the proposed amendments exceed the requirements of applicable federal law?**

Currently, federal regulations similar to the proposed regulations do not exist so the proposed regulations do not exceed the requirements of applicable federal law. The proposed fee structure is minimal and less costly to certification applicants than becoming certified through EPA, NRSB, and NEHA.

- 3. Description of costs to agencies, to the general public and to persons who are affected by, or are subject to, the regulations:**

- a) Capital and annual costs of compliance with the proposed amendments and the persons who will bear those costs.**

The proposed regulations impose no new capital costs to the implementing department, the public, or those subject to the regulations. The regulations will result in an increase of operating costs for all parties subject to the regulations pursuant to the payment and collection of fees. The department will bear the annual costs of administering, implementing, and enforcing the proposed regulations. Applicants for radon proficiency certification will bear the cost of training and continuing education courses, the cost of which likely will be passed on to consumers contracting with the certified radon technicians.

- b) Initial and annual costs of implementing and enforcing the proposed amendments, including the estimated amount of paperwork, and the state agencies, other governmental agencies or other person or entities who will bear the costs.**

During the first year (SFY 2012), the radon certification program will earn an estimated \$1,900 taking into account extra staff duties and conversion of an existing online certification program for use by radon along with fees collected. Because radon certification fees will be collected on a biennial basis, the income during the second year of operation (SFY2013) is estimated to be a loss of approximately \$7,900. During the third year (SFY 2014), as more technicians are trained and certified, the program is estimated to balance out with an income of approximately \$6,000. The following table provides projections for the radon certification program fee fund.

		Program Income (Cost) SFY 2012	Program Income (Cost) SFY 2013*	Program Income (Cost) SFY 2014*
Personnel (Annual @ projected SFY 2012 levels)				
Salary + Fringe	5% Research Analyst (K171716) (certification and fees management)	(\$2,500)	(\$2,590)	(\$2,670)
	10% Environmental Technician (K122224) (certification and fees management)	(\$5,650)	(\$5,820)	(\$5,995)
	Total annual personnel cost	(\$8,150)	(\$8,410)*	(\$8,665)*
Operations				
Prof Fees/Svcs	IT services to convert existing lead/asbestos online certification program/database to radon + annual maintenance <i>ESTIMATION</i>	(\$5,000)	(\$2,500)	(\$2,500)
	TOTAL PROGRAM EXPENSES	(\$13,150)	(\$10,910)	(\$11,165)
Estimated income from fees				
Radon Measurement Technician (\$100/technician – biannual fee) Estimates: SFY 2012: 50 SFY 2013: 65 SFY 2014: 80		\$5,000	\$1,500	\$8,000
Radon Mitigation Technicians (\$100/technician – biannual fee) Estimates: SFY 2012: 25 SFY 2013: 40 SFY 2014: 55		\$2,500	\$1,500	\$5,500
Radon Laboratory (\$250/laboratory – biannual fee) Estimates: SFY 2012: 15 SFY 2013: 15 SFY 2014: 15		\$3,750	\$0	\$3,750
	Total estimated program income from fees	\$11,250	\$3,000	\$17,250
	TOTAL PROGRAM INCOME (EXPENSE)	\$1,900	(\$7,910)	\$6,085

* Assume 3% annual increase in salary/fringe benefits each year

Other than fees, funding sources for the radon certification program are limited. The only other funding source for the Kansas Radon Program at large is the EPA State Indoor Radon Grant (SIRG). The department currently uses SIRG funds for partial support of the cost of training measurement and mitigation technicians and for collecting radon measurement and mitigation data in Kansas. The department will continue utilizing grant funds for these activities, and the fee fund will apply to the cost of administering the certification program because EPA grant objectives preclude EPA funds from being used for certification programs.

The department anticipates an increase in funding levels as additional measurement and mitigation technicians become certified to cover the increased demand for testing due to the 2008 Radon Awareness Law. At this time, it is difficult to predict the increase in certified technician numbers resulting from the approval of these regulations because there is no measure of how many uncertified technicians are currently meeting radon services demands.

There are no new FTE positions accounted for in this estimation. Existing program staff is slated to handle the minimal increase in workload resulting from the certification program. The department expects a minimal increase in paperwork due to the planned online application option because technicians will be able to apply for certification using one of two methods: an online application or a paper application.

c) Costs which would likely accrue if the proposed regulations are not adopted, the persons who will bear the costs and those who will be affected by the failure to adopt the regulations.

When radon measurements are performed incorrectly, consumers do not receive accurate information about radon levels in their homes, which can delay or prevent mitigation. When mitigation systems are installed incorrectly, they can elevate radon levels and increase carbon monoxide levels in homes. Without access to consistent and skilled radon measurement and mitigation services, Kansas consumers will continue to experience increased medical costs due to health complications from radon and carbon monoxide including lung cancer, fatigue, chest pain, impaired vision and coordination, headaches, dizziness, confusion, nausea, and reduced brain function (EPA data). In some cases, the costs associated with medical care fall to the state, although it is difficult to quantify how much because there is no measure of how many lung cancers and other complications are prevented by radon mitigation.

d) A detailed statement of the data and methodology used in estimating the costs used in the statement.

The data and methodology of these cost estimates were obtained using the current budget estimates and EPA references, documents, and publications on SIRG. Where supportable, some general inferences were made to relate state level data from other states to the State of Kansas and KDHE. Costs regarding health care related to radon and carbon monoxide exposure are difficult to assess because there is no measure of how many cancers or other medical complications are prevented due to radon mitigation.

- e) **Description of any less costly or less intrusive methods that were considered by the agency and why such methods were rejected in favor of the proposed regulations.**

There are no less intrusive or less costly methods that were available for consideration by KDHE to achieve the purposes of the proposed regulations.

- f) **Consultation with League of Kansas Municipalities, Kansas Association of Counties, and Kansas Association of School Boards.**

The department will provide copies of this Regulatory Impact Statement and proposed regulations to each of these organizations concurrently with publication of the notice of public hearing. The department does not anticipate that the proposed regulations will have any direct fiscal impact on these three organizations.