

TITLE 180 CONTROL OF RADIATION

CHAPTER 11 REQUIREMENTS FOR RADON AND RADON PROGENY
MEASUREMENT AND MITIGATION SERVICES

11-001 SCOPE AND AUTHORITY

11-001.01 180 NAC 11 provides for the licensure of radon measurement specialists, ~~radon measurement technicians,~~ radon measurement businesses, radon mitigation specialists, ~~radon mitigation technicians,~~ and radon mitigation businesses. The regulations are authorized by and implement the Nebraska Radiation Control Act, Neb. Rev. Stat. §§71-3501 to 71-3520~~19~~, the Uniform Credentialing Act (UCA), Neb. Rev. Stat. §§38-101 to 38-1,140, the Administrative Procedure Act and 184 NAC 1.

11-001.02 In addition to the requirements of 180 NAC 11, all licensees are subject to 180 NAC 1, 4, 10, ~~and, 17 and 18; and 3-010, 3-011.02, 3-018, 3-019, 3-020 and 3-021.~~

~~11-001.03 Additional authority for these regulations are found in the Uniform Licensing Law, Neb. Rev. Stat. §§71-162 to 71-162.05, Administrative Procedure Act and 184 NAC 4.~~

11-002 DEFINITIONS:

Active addiction means current physical or psychological dependence on alcohol or a substance, which develops following the use of alcohol or a substance on a periodic or continuing basis.

Alcohol or substance abuse means a maladaptive pattern of alcohol or substance use leading to clinically significant impairment or distress as manifested by one or more of the following occurring at any time during the same 12-month period:

1. Recurrent alcohol or substance use resulting in a failure to fulfill major role obligations at work, school, or home;
2. Recurrent alcohol or substance use in situations in which it is physically hazardous;
3. Recurrent legal problems related to alcohol or substance use; or
4. Continued alcohol or substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the alcohol or substance use.

Attest/Attestation means that the individual declares that all statements on the application/petition are true and complete. Attestation to meeting continuing competency requirements satisfies the documentation requirement of Neb. Rev. Stat. § 38-142.

Backdrafting means a condition where the normal movement of combustion products up a flue, resulting from the buoyant forces on the hot gases, is reversed, so that the combustion products can enter the house. Backdrafting of combustion appliances can occur when depressurization in the house overwhelms the buoyant force on the hot gases and can also be caused by high air pressures or blockage at the chimney or flue termination.

Backer Rod means a semi-rigid foam material resembling a rope of various diameters used to fill around pipes, etc. to assist in making a sealed penetration.

Block Wall Depressurization means a radon mitigation technique that depressurizes the void network within a block wall foundation by drawing air from inside the wall and venting it to the outside.

Client means the person, persons, or company that contracts with a radon mitigation business or specialist to install a radon reduction system in a building.

Combination Foundations means buildings constructed with more than one foundation type such as basement/crawlspace or basement/slab-on-grade.

Combustion Appliance means any device which utilizes the ignition of a fuel to perform work for a specific purpose including but not limited to heating, drying, cooling, and refrigeration.

Communication Test means a diagnostic test designed to qualitatively measure the ability of a suction field and air flow to extend through the material beneath a concrete slab floor and thus evaluate the potential effectiveness of a sub-slab depressurization system.

Complete application means an application that contains all of the information requested on the application, with attestation to its truth and completeness, and that is submitted with the required fees and all required documentation.

Confidential information means information protected as privileged under applicable law.

Consumer means a person receiving health or health-related services or environmental services and includes a patient, client, resident, customer, or person with a similar designation.

Conviction means a plea or verdict of guilty or a conviction following a plea of nolo contendere or non vult contendere made to a formal criminal charge, or a judicial finding of guilt irrespective of the pronouncement of judgment or the suspension thereof, and includes instances in which the imposition or the execution of sentence is suspended following a judicial finding of guilt and the defendant is placed on probation.

Course of study means a program of instruction necessary to obtain a license meeting the requirements set out for each profession in the appropriate practice act and rules and regulations and includes a college, a professional school, a vocational school, hours of training, or a program of instruction with a similar designation.

Crawlspace Depressurization means a radon control technique designed to achieve lower air pressure in the crawlspace relative to indoor air pressure by use of a fan-powered vent drawing air from within the crawlspace.

Credential means a license, certificate, or registration.

Department means the Division of Public Health of the Department of Health and Human Services ~~Regulation and Licensure~~.

Dependence means a maladaptive pattern of alcohol or substance use, leading to clinically significant impairment or distress, as manifested by three or more of the following occurring at any time in the same 12-month period:

1. Tolerance as defined by either of the following:
 - a. A need for markedly increased amounts of alcohol or the substance to achieve intoxication or desired effect; or
 - b. A markedly diminished effect with continued use of the same amount of alcohol or the substance;
2. Withdrawal as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for alcohol or the substance as referred to in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, published by the American Psychiatric Association; or
 - b. Alcohol or the same substance or a closely related substance is taken to relieve or avoid withdrawal symptoms;
3. Alcohol or the substance is often taken in larger amounts or over a longer period than was intended;
4. A persistent desire or unsuccessful efforts to cut down or control alcohol or substance use;
5. A great deal of time is spent in activities necessary to obtain alcohol or the substance, to use alcohol or the substance; or to recover from the effects of use of alcohol or the substance;
6. Important social, occupational, or recreational activities are given up or reduced because of alcohol or substance use; or
7. Alcohol or substance use continues despite knowledge of having had a persistent or recurrent physical or psychological problem that was likely to have been caused or exacerbated by alcohol or the substance.

Diagnostic Tests means tests performed or procedures used to determine appropriate radon mitigation systems for a building.

Director means the Director of Public Health of the Division of Public Health or his/her designee.

Drain Tile Loop means a continuous length of drain tile or perforated pipe extending around all or part of the internal or external perimeter of a basement or crawlspace footing.

Inactive credential means a credential which the credential holder has voluntarily placed on inactive status and by which action has terminated the right to practice or represent him/herself as having an active credential.

License means an authorization issued by the Department to an individual to engage in a profession or to a business to provide services which would otherwise be unlawful in this state in the absence of such authorization.

Mechanically Ventilated Crawlspace System means a radon control technique designed to increase ventilation within a crawlspace, achieve higher air pressure in the crawlspace relative to air pressure in the soil beneath the crawlspace, or achieve lower air pressure in the crawlspace relative to air pressure in the living spaces, by use of a fan.

Military service means full-time duty in the active military service of the United States, a National Guard call to active service for more than 30 consecutive days, or active service as a commissioned officer of the Public Health Service or the National Oceanic and Atmospheric Administration. Military service may also include any period during which a servicemember is absent from duty on account of sickness, wounds, leave, or other lawful cause. (From the Servicemembers Civil Relief Act, 50 U.S.C. App. 501 et seq., as it existed on January 1, 2007.)

Mitigation means any action taken to reduce radon or radon progeny concentrations in the indoor atmosphere or to prevent entry of radon or radon progeny into the atmosphere, to include but not be limited to, application of materials, installation of systems, or any repair or alteration of a building or design.

Mitigation System means any system or materials installed for the purpose of reducing radon or radon progeny concentrations.

Natural Draft Appliance means any combustion appliance that does not have fanforced combustion venting and therefore is more likely to be susceptible to backdrafting.

Passive New Construction System means a system installed in new construction that relies solely on the convective air flow upward in the vent pipe for sub-slab depressurization and consists of a vertical vent pipe routed through conditioned space from the suction pit to 12 inches above the roof.

Pattern of incompetent or negligent conduct means a continued course of incompetent or negligent conduct in performing the duties of the profession.

Perimeter Channel Drain means a means for collecting water in a basement by means of a large gap or channel between the concrete floor and the wall. Collected water may flow to aggregate beneath the slot ("French Drain") or to a sump where it can be drained or pumped away.

Picocurie per liter (pCi/l) means 2.22 transformations per minute of radioactive material per liter of air.

Pressure Field Extension means the distance that a pressure change is induced in the sub-slab area, measured from a single or multiple suction points.

Profession means any profession or occupation named in subsection (1) or (2) of Neb. Rev. Stat. 38-121.

Radon means the radioactive noble gas radon-222 (Rn-222) and as used in these regulations includes radon progeny.

Radon Measurement Business means a person, including a laboratory, who analyzes or tests for and measures radon or radon progeny concentrations and which employs one or more radon measurement specialist.

Radon Measurement Specialist means an individual who performs radon or radon progeny measurements for a radon measurement business; or provides professional advice on radon or radon progeny measurements, health risks, radon-related exposure, radon entry routes, or other radon-related activities; and may perform the duties of a radon measurement technician.

~~Radon Measurement Technician means an individual who performs radon or radon progeny measurement activities or provides information on test results for a radon measurement business.~~

Radon Mitigation Business means a person who designs or installs systems in existing buildings to mitigate radon or radon progeny and which employs one or more radon mitigation specialist.

Radon Mitigation Specialist means an individual who designs mitigation systems, or an individual who performs and evaluates diagnostic tests to determine appropriate radon or radon progeny mitigation systems and may perform the duties of a radon mitigation technician for a radon mitigation business.

~~Radon Mitigation Technician means an individual who installs or supervises the installation of radon or radon progeny mitigation systems on existing buildings for a radon mitigation business.~~

Radon Progeny means the short-lived radionuclides formed as a result of the decay of radon-222, including polonium-218, lead-214, bismuth-214, and polonium-214.

~~Passive New Construction System means a system installed in new construction that relies solely on the convective air flow upward in the vent pipe for sub-slab depressurization and consists of a vertical vent pipe routed through conditioned space from the suction pit to 12 inches above the roof.~~

Radon resistant new construction (RRNC) means the established standards and techniques for control of radon by using a passive new construction system, as described in the "International Residential Code (IRC) for One and Two Family Dwellings," International Code Council, 2000, or any substantially equivalent techniques.

Re-entrainment means the unintended re-entry into a building of radon that is being exhausted from the vent of a radon mitigation system.

Registry means a list of persons who offer a specified service or activity.

Served in the regular armed forces has the same meaning as "military service" in these regulations.

Soil Gas means the gas mixture present in soil which may contain radon.

Soil Gas Retarder means a continuous membrane or other comparable material used to retard the flow of soil gases into a building.

Stack Effect means the overall upward movement of air inside a building that results from heated air rising and escaping through openings in the building envelope, thus causing indoor air pressure in the lower portions of a building to be lower than the pressure in the soil beneath or surrounding the building foundation.

Sub-Membrane Depressurization means a radon control technique designed to achieve lower air pressure in the space under a soil gas retarder membrane laid on the crawlspace floor, relative to air pressure in the crawlspace, by use of a fan-powered vent drawing air from beneath the membrane.

Sub-Slab Depressurization (Active) means a radon control technique designed to achieve lower sub-slab air pressure relative to indoor air pressure by use of a fan-powered vent drawing air from beneath the concrete slab.

Sub-Slab Depressurization (Passive) means a radon control technique designed to achieve lower sub-slab air pressure relative to indoor air pressure by use of a vent pipe (without a fan) routed through the conditioned space of a building and connecting the sub-slab area to the outdoor air. This system relies primarily on the convective flow of warmed air upward in the vent to draw air from beneath the concrete slab.

Working Level (WL) means the concentration of short-lived radon progeny that will result in 1.3E + 5 million electron volts of potential alpha particle energy per liter of air.

Working Level Month (WLM) means a unit of exposure used to express the accumulated human exposure to radon decay products. It is calculated by multiplying the average working level to which a person has been exposed by the number of hours exposed and dividing the product by 170.

11-003 GENERAL PROVISIONS EXEMPTIONS

11-003.01 Beginning on October 30, 1996, no person may provide services for the measurement or mitigation of the presence of radon in the State of Nebraska unless such person has been licensed as provided in 180 NAC 11. These regulations in no way exempt any person from other state or local occupational licensure requirements.

The licensure requirements of 180 NAC 11 do not apply to:

1. Individuals measuring or mitigating the premises in which they reside.
2. Federal, state, county and local health departments and their employees who provide professional advice on radon measurement or mitigation activities in the course of their assigned duties.

- ~~3. County extension agents and specialists of the Cooperative Extension Service of the University of Nebraska who provide professional advice on radon measurement or mitigation activities in the course of their assigned duties.~~
- ~~4. Persons who are employed for the purpose of disseminating educational information to the public, such as educational institutions or community action agencies, who perform radon screening services without charge to the recipient of the service in the course of their assigned duties.~~
- ~~5. An individual, business entity or government entity using radon resistant new construction techniques during new construction. Any radon measurement or mitigation activity, including the activation of a passive new construction system with a fan, conducted after construction is complete must comply with 180 NAC 11.~~

11-003.02 Exemptions: The licensure requirements of 180 NAC 11 do not apply to:

1. Individuals measuring or mitigating the premises in which they reside.
2. Federal, state, county and local health departments and their employees who provide professional advice on radon measurement or mitigation activities in the course of their assigned duties.
3. County extension agents and specialists of the Cooperative Extension Service of the University of Nebraska who provide professional advice on radon measurement or mitigation activities in the course of their assigned duties.
4. Persons who are employed for the purpose of disseminating educational information to the public, such as educational institutions or community action agencies, who perform radon screening services without charge to the recipient of the service in the course of their assigned duties.
5. An individual, business entity or government entity using radon resistant new construction techniques during new construction. Any radon measurement or mitigation activity, including the activation of a passive new construction system with a fan, conducted after construction is complete must comply with 180 NAC 11.

11-004 OPERATING REQUIREMENTS: The following conditions must be met to keep a radon license in the State of Nebraska.

GENERAL PROVISIONS

11-004.01 Operating Requirements for a Licensed Individual: ~~Beginning on October 30, 1996, no person may provide services for the measurement or mitigation of the presence of radon in the State of Nebraska unless such person has been licensed as provided in 180 NAC 11. These regulations in no way exempt any person from other state or local occupational licensure requirements.~~

1. The licensee must conduct his/her activities as described in the approved license and in accordance with provisions of the Act, all sections of these regulations, and all other related municipal, county, state, and federal laws and regulations.
2. Use equipment and procedures adequate to minimize danger to the public health and safety or property.
3. Complete continuing education requirements specified in 180 NAC 11-008.

4. The licensee must allow authorized representatives of the Department to have access during normal business hours to his/her facilities, offices and files for inspection and examination of radon-related records and test procedures. The licensee must also allow authorized representatives of the Department to accompany him/her while performing any radon measurement or mitigation activities for the purpose of inspecting these activities, with the approval of the property owner or resident on whose property such activity is being performed.
5. Additional responsibilities specific to the radon measurement specialist must include:
 - a. Conducting all radon testing, including post-mitigation testing. This includes the initial placement and final retrieval of all measurement devices. All testing must be conducted according to standards described in Protocols for Radon and Radon Decay Product Measurements in Homes, Publication No. EPA 402-R-93-003, June 1993; and Indoor Radon and Radon Decay Product Measurement Device Protocols, Publication No. EPA 402-R-92-004, July 1992, incorporated herein by this reference and available for viewing at the Nebraska Radon Program, Department of Health and Human Service, 301 Centennial Mall South, 3rd Floor, Lincoln, Nebraska 68509-5026;
 - b. Ensuring that all radon measurement devices are approved by the National Environmental Health Association (NEHA), the National Radon Safety Board (NRSB), or a national proficiency program approved by the Department;
 - c. Ensuring that all radon measurement devices are calibrated annually. Calibration must be conducted by either the manufacturer, or a chamber approved by the National Environmental Health Association (NEHA) or the National Radon Safety Board (NRSB);
 - d. Directing measurement activities for the licensed business to include reviewing, approving, signing, and submitting monthly reports to the Department containing the information specified in 180 NAC 11-010.01.
 - e. Informing clients of radon levels in accordance with the provisions of 180 NAC 11-010.03;
 - f. Assessing quality assurance and quality control measures, and adhering to an approved quality assurance plan, as required in 180 NAC 11-006.01A;
 - g. Evaluating operating procedures, and ensuring compliance with state and federal regulations; and
 - h. Being present during scheduled visits by the Department.
6. Additional responsibilities specific to the radon mitigation specialist include:
 - a. Directing mitigation activities for the licensed business to include reviewing, approving, signing, and submitting monthly reports to the Department containing the information specified in 180 NAC 11-010.04;
 - b. Evaluating operating procedures and ensuring compliance with state and federal regulations;
 - c. Assessing quality assurance and quality control measures, and adhering to an approved quality assurance plan, as required in 180 NAC 11-006.02A;

- d. Evaluating diagnostic tests in a building and designing mitigation systems to be in compliance with 180 NAC 11-009 Mitigation System Installation Requirements; and
- e. Being present during scheduled visits by the Department.

11-004.02 Operating Requirements for a Radon Measurement Business:~~No license will be approved unless the following conditions have been met:~~

1. Radon Measurement Businesses must ensure that all employed Radon Measurement professionals conduct tests according to standards described in protocols referenced in 11-004.01(5)a, as well as in accordance with provisions of the Act, all sections of these regulations, and all other related municipal, county, state, and federal laws and regulations.
 2. The radon measurement business must maintain on staff or retain as a consultant a radon measurement specialist. If a radon measurement business loses its radon measurement specialist, the radon measurement business must notify the Department in writing within five business days. The radon measurement business must obtain another radon measurement specialist within 30 days of the loss of the radon measurement specialist. Under this provision, the radon measurement business must not operate more than 60 days in any one calendar year without a radon measurement specialist.
 3. The radon measurement business must maintain the following records for five years:
 - a. Records of all radon tests performed;
 - b. Records of instrument calibrations and quality control;
 - c. Records of completing continuing education courses specified in 180 NAC 11-008;
 - d. Records of employee exposure to radon during employment;
 - e. Copies of licenses for radon measurement specialists employed or used as consultants.
 4. Any changes in the information provided in the original or renewal application, including changes in licensed personnel or to the quality assurance documents, must be submitted as an amendment request to the Department for approval prior to implementation.
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- ~~1. The applicant has not been found to be in violation of the Act, or 180 NAC 11 and has not had a license or certification terminated.~~
 - ~~2. The applicant has filed an accurate and complete license application with the license fee.~~
 - ~~3. The applicant is qualified to perform the activities for which s/he is seeking licensure, including the training and experience required in 180 NAC 11 and that the applicant's proposed equipment and procedures are adequate to minimize danger to the public health and safety or property and are in compliance with municipal, county, state and federal laws and regulations.~~

11-004.03 Operating Requirements for a Radon Mitigation Business:~~Requirements for continued licensure must include, at a minimum, the following conditions:~~

1. The radon mitigation business must maintain on staff or retain as a consultant a radon mitigation specialist. If a radon mitigation business loses its radon mitigation specialist, the radon mitigation business must notify the Department in writing within five business days. The radon mitigation business must obtain another radon mitigation specialist within 30 days of the loss. Under this provision, the radon mitigation business must not operate more than 60 days in any one calendar year without a radon mitigation specialist.
 2. The radon mitigation business must assure that radon mitigation system installations are performed under the supervision of a radon mitigation specialist and according to 180 NAC 11-009 Mitigation System Installation Requirements, as well as in accordance with provisions of the Act, all sections of these regulations, and all other related municipal, county, state, and federal laws and regulations.
 3. The radon mitigation business must provide all warranty information on the reduction of the radon level, or the proper functioning of mitigation equipment in writing to clients. Nothing in 180 NAC 11 limits warranties applicable to any client pursuant to any state or federal law.
 4. The radon mitigation business must maintain at a minimum the following records for five years:
 - a. Records of all mitigation work performed, including client name, address, diagnostic test results, a description of each mitigation system and materials installed, pre-mitigation and post-mitigation measurements including method of measurement and all pertinent dates.
 - b. Records of mitigation plans developed and signed by a radon mitigation specialist.
 - c. Records of all instrument calibrations, contracts, and warranties on equipment installed.
 - d. Records of completing continuing education courses specified in 180 NAC 11-008.
 - e. Records of employee exposure to radon during employment.
 - f. Copies of the licenses for radon mitigation specialists employed or used as consultants.
 5. Any changes in the information provided in the original or renewal application, including changes in licensed personnel, must be submitted as an amendment request to the Department for approval prior to implementation.
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- ~~1. The licensee must conduct his/her activities as described in the approved license and in accordance with provisions of the Act, all sections of these regulations, and all other related municipal, county, state, and federal laws and regulations.~~
 - ~~2. The licensee must allow authorized representatives of the Department to have access during normal business hours to his/her facilities, offices and files for inspection and examination of radon-related records and test procedures. The licensee must also allow authorized representatives of the Department to~~

~~accompany him/her while performing any radon measurement or mitigation activities for the purpose of inspecting these activities, with the approval of the property owner or resident on whose property such activity is being performed.~~

~~3. The licensee must provide documentation that they meet the proficiency requirements, including continuing education, specified in 180 NAC 11-013.~~

~~4. Pay the renewal fee as prescribed in 180 NAC 11-017.~~

~~5. Pay \$10 per day for each day s/he practiced after the expiration date of his/her license.~~

~~6. Respond to the following questions:~~

~~a. Has your license in any profession in another state been revoked, suspended, limited, or disciplined in any manner?~~

~~b. Have you been convicted of a misdemeanor or felony?~~

~~These questions relate to the time period since the last renewal of the license or during the time period since initial licensure in Nebraska if such occurred within the year prior to the license expiration date.~~

~~7. If any disciplinary action was taken against the applicant's license by another state, an official copy of the disciplinary action, including charges and disposition must be provided.~~

~~8. If the licensee has been convicted of a felony or misdemeanor, the licensee must cause to be submitted to the Department:~~

~~a. Official Court Record, which includes charges and disposition;~~

~~b. Copies of arrest records;~~

~~c. A letter from the licensee explaining the nature of the conviction;~~

~~d. All addiction/mental health evaluations and proof of treatment, if the conviction involved a drug and/or alcohol related offense and if treatment was obtained and/or required; and~~

~~e. A letter from the probation officer addressing probationary conditions and current status, if the applicant is currently on probation.~~

~~9. The licensee must remain in compliance with the Act, and 180 NAC 11. Any changes in the information provided in the original or renewal application, including changes in licensed personnel, must be submitted as an amendment request to the Department for approval prior to implementation.~~

11-004.04 Operating Requirements for a Radon Laboratory:~~All licenses issued by the Department under 180 NAC 11 will expire on March 31 of each year (unless renewed as provided below.) No radon measurement or mitigation activity will be conducted after the expiration of the term of the license.~~

1. To maintain approval as a radon laboratory, a laboratory must meet the requirements of 180 NAC 11.

2. Each laboratory approval issued is nontransferable. Each approval will expire on March 31 of each odd-numbered year. The operator of a radon laboratory may apply for renewal of approval by submitting an application for renewal that complies with the requirements of 180 NAC 11-006.03 and includes the appropriate fees. To have its approval renewed, the laboratory must

document that it has maintained the certification status required by 180 NAC 11-006.03.

3. The Department may refuse to issue an approval and may revoke or suspend an approval issued under this rule if the operator of the laboratory fails to meet any of the criteria listed in 180 NAC 11-006.03.

~~11-004.05 An application for annual license renewal must be on a form provided by the Department and must be accompanied by the fee specified in 180 NAC 11-017. A license renewal is issued or denied according to the criteria set forth in 180 NAC 11.~~

1. ~~First Notice: At least 30 days before March 31 of each year, the Department will send a renewal notice by means of regular mail to each licensee at the licensee's last place of residence as noted in the records of the Department. It is the responsibility of the licensee prior to the renewal period to notify the Department of any name and/or address changes.~~

~~The renewal notice must specify:~~

- ~~(1) The name of the licensee;~~
- ~~(2) The licensee's last known address of record;~~
- ~~(3) The license number;~~
- ~~(4) The expiration date of the license;~~
- ~~(5) The renewal fee as prescribed in 180 NAC 11-017; and~~
- ~~(6) The number of continuing education hours required for renewal.~~

~~b. The licensee must apply for renewal by submitting to the Department:~~

- ~~(1) The renewal notice;~~
- ~~(2) The renewal fee;~~
- ~~(3) The licensee's social security number;~~
- ~~(4) Attestation of completing continuing education required under 180 NAC 11-013; and~~
- ~~(5) Documentation relating to misdemeanor or felony conviction(s) or licensure revocation, suspension, limitation or disciplinary action (if applicable).~~

2. ~~Second Notice: The Department will send to each licensee who fails to renew his/her license in response to the first notice, a second notice of renewal in accordance with the requirements of 180 NAC 11.~~

~~a. The notice must specify:~~

- ~~(1) That the licensee failed to pay the renewal fee;~~
- ~~(2) That the license has expired;~~
- ~~(3) That the licensee is subject to an administrative penalty under 180 NAC 11-018 if s/he practices after the expiration date;~~
- ~~(4) That upon receipt of the renewal fee, together with an additional~~

~~late fee of \$25, and documentation of continuing competency hours within that time, no order of revocation will be entered; and~~
(5) ~~That upon failure to receive \$25 in addition to the regular renewal fee, and documentation of continuing competency hours, the license will be revoked as specified in 180 NAC 11.~~

b. ~~The licensee must apply for renewal by submitting to the Department:~~

- ~~(1) The renewal notice;~~
- ~~(2) The renewal fee and the additional late fee of \$25;~~
- ~~(3) The licensee's social security number;~~
- ~~(4) Attestation by the licensee:
That s/he has not practiced in Nebraska since the expiration of her/his license; or
To the actual number of days practiced in Nebraska since the expiration of her/his license;~~
- ~~(5) Attestation of completing continuing education required under 180 NAC 11-013; and~~
- ~~(6) Documentation relating to misdemeanor or felony conviction(s) or licensure revocation, suspension, limitation or disciplinary action (if applicable).~~

~~11-004.06 Applications for initial and renewal license must be submitted along with the fees specified in 180 NAC 11-017 to the Department of Health and Human Services Regulation and Licensure, P.O. Box 95007, Lincoln, NE 68509-5007. Checks or money orders must be made payable to Department of Health and Human Services Regulation and Licensure.~~

~~11-004.07 All applications should clearly label any information considered proprietary and segregate such information from non-proprietary information to the extent possible (Neb. Rev. Stat. § 84-712.05(3) and Neb. Rev. Stat. § 87-502).~~

11-005 INITIAL LICENSE FOR AN INDIVIDUAL; QUALIFICATIONS AND APPLICATION LICENSE REQUIREMENTS FOR RADON MEASUREMENT SPECIALISTS

11-005.01 Qualifications for a Radon Measurement Specialist: To receive a license to practice Radon Measurement, an individual must meet the following qualifications: The following qualifications are required for initial licensure as a radon measurement specialist:

1. Age and Good Character: Be at least 19 years old and of good character;
2. Citizenship/Resident Information: Be a citizen of the United States, an alien lawfully admitted into the United States for permanent residence under the Immigration and Naturalization Act (INA) and who is eligible for a credential under the Uniform Credentialing Act, or a nonimmigrant whose visa for entry, or application for visa for entry, is related to employment in the United States.
3. Education: Within four years prior to application, the individual must have successfully completed a training course and passed an examination on radon

measurements approved by the Department under the requirements specified in 180 NAC 11-007.

- ~~1. The individual must submit an application that contains applicant name, social security number, mailing address (including city, state, and zip code) and phone number to the Department along with the fee specified in 180 NAC 11-017.~~
- ~~2. Within four years prior to application, the individual must have successfully completed a training course and passed an examination on radon measurements, approved by the Department under the requirements specified in 180 NAC 11-014.~~
- ~~3. The individual must meet the proficiency requirements of 180 NAC 11-013.01.~~
- ~~4. The individual must be at least the age of majority upon application.~~

11-005.02 Qualifications for a Radon Mitigation Specialist: To receive a license to practice Radon Mitigation, an individual must meet the following qualifications:

1. Age and Good Character: Be at least 19 years old and of good character;
2. Citizenship/Resident Information: Be a citizen of the United States, an alien lawfully admitted into the United States for permanent residence under the Immigration and Naturalization Act (INA) and who is eligible for a credential under the Uniform Credentialing Act, or a nonimmigrant whose visa for entry, or application for visa for entry, is related to employment in the United States.
3. Education: Within four years prior to application, the individual must have successfully completed a training course and passed an examination on radon mitigation approved by the Department under the requirements specified in 180 NAC 11-007.
4. Experience: The applicant must possess any combination of two years of relevant post-secondary education or relevant work experience.
 - a. Relevant post-secondary education means a curriculum in architecture, engineering, building construction, physical sciences, or related disciplines. One year of post-secondary education consists of a minimum of 24 semester hours, of which at least ten hours must be in the above subject areas, or 36 quarter hours, of which at least 15 hours must be in the above subject areas.
 - b. Relevant work experience means the design, construction and renovation of buildings, or associated heating, ventilation, and air conditioning systems.

11-005.03 Application: To apply for a license to practice radon measurement or mitigation, the individual must submit a complete application to the Department. A complete application includes all required documentation, the required fee, and a written application. Applications must be submitted to the Nebraska Radon Program, Department of Health and Human Services, P.O. Box 95026, Lincoln NE 68509-5026. Checks or money orders must be made payable to the Department of Health and

Human Services. The applicant may obtain an application from the Department or construct an application that must contain the following information:

1. Written Application:

a. Personal Information:

- (1) The legal name of the applicant, maiden name (if applicable), and any other names by which the applicant is known;
- (2) Date of birth (month, day, and year);
- (3) Place of birth (city and state or country if not born in the United States);
- (4) Mailing address (street, rural route, or post office address; and city, state, and zip code, or country information);
- (5) The applicant's:
 - (a) Social Security Number (SSN);
 - (b) Alien Registration Number ("A#"); or
 - (c) Form I-94 (Arrival-Departure Record) number.

Certain applicants may have both a SSN and an A# or I-94 number, and if so, must report both.

- (6) The applicant's telephone number including area code (optional);
- (7) The applicant's e-mail address (optional);
- (8) The applicant's fax number (optional);
- (9) Citizenship: The applicant must state that s/he is one of the following:
 - (a) A citizen of the United States;
 - (b) An alien lawfully admitted into the United States for permanent residence under the Immigration and Naturalization Act (INA) and who is eligible for a credential under the Uniform Credentialing Act; or
 - (c) A non-immigrant whose visa for entry, or application for visa for entry, is related to such employment in the United States;

b. Practice Before Application: The applicant must state:

- (1) That s/he has not practiced radon measurement or mitigation in Nebraska before submitting the application; or
- (2) If s/he has practiced radon measurement or mitigation in Nebraska before submitting the application, the actual number of days practiced in Nebraska before submitting the application for a license and the name and location of practice.

c. Respond to the following questions:

- (1) Has your license in any profession in another state been revoked, suspended, limited, or disciplined in any manner?
- (2) Have you been convicted of a misdemeanor or felony?

d. Attestation: The applicant must attest that:

- (1) S/he has read the application or has had the application read to him/her;

- (2) All statements on the application are true and complete;
- (3) S/he is of good character; and
- (4) S/he has not committed any act that would be grounds for denial under 180 NAC 11-012.

2. Documentation: The applicant must submit the following documentation with the application:

- a. Evidence of age, such as:
 - (1) Driver's license;
 - (2) Birth certificate;
 - (3) Marriage license that provides date of birth;
 - (4) Transcript that provides date of birth;
 - (5) U.S. State identification card;
 - (6) Military identification; or
 - (7) Other similar documentation;
- b. Evidence of good character, including:
 - (1) Disciplinary Action, if applicable: A list of any disciplinary actions taken against the applicant's license (in any profession in Nebraska or another state) and a copy of the disciplinary action(s), including charges and disposition;
 - (2) Conviction Information: If the applicant has been convicted of a felony or misdemeanor, the applicant must submit to the Department:
 - (a) A list of any misdemeanor or felony convictions;
 - (b) A copy of the court record, which includes charges and disposition;
 - (c) Explanation from the applicant of the events leading to the conviction (what, when, where, why) and a summary of actions the applicant has taken to address behaviors/actions related to the conviction;
 - (d) All addiction/mental health evaluations and proof of treatment, if the conviction involved a drug and/or alcohol related offense and if treatment was obtained and/or required; and
 - (e) A letter from the probation officer addressing probationary conditions and current status, if the applicant is currently on probation
- c. Evidence that the applicant is:
 - (1) A citizen;
 - (2) An alien lawfully admitted into the United States for permanent residence under the Immigration and Naturalization Act (INA) who is eligible for a credential under the Uniform Credentialing Act; or
 - (3) A non-immigrant whose visa for entry, or application for visa for entry, is related to such employment in the United States;
- d. Evidence of citizenship, lawful permanent residence, and/or immigration status may include a copy of:
 - (1) A U.S. Passport (unexpired or expired);

- (2) A birth certificate issued by a state, county, municipal authority or outlying possession of the United States bearing an official seal;
- (3) An American Indian Card (I-872);
- (4) A Certificate of Naturalization (N-550 or N-570);
- (5) A Certificate of Citizenship (N-560 or N-561);
- (6) Certification of Report of Birth (DS-1350);
- (7) A Consular Report of Birth Abroad of a Citizen of the United States of America (FS-240);
- (8) Certification of Birth Abroad (FS-545 or DS-1350);
- (9) A United States Citizen Identification Card (I-197 or I-179);
- (10) A Northern Mariana Card (I-873);
- (11) An Alien Registration Receipt Card (Form I-551, otherwise known as a "Green Card");
- (12) An unexpired foreign passport with an unexpired Temporary I-551 stamp bearing the same name as the passport;
- (13) A document showing an Alien Registration Number ("A#") with visa status; or
- (14) A Form I-94 (Arrival-Departure Record) with visa status;
- e. Documentation of education, if applicable, including:
 - (1) Transcript from school, college or university showing appropriate classes taken, and number of semester or quarter hours earned; and/or
 - (2) Certificate or letter of successful completion of approved training course.
- f. Documentation of examination, including:
 - (1) Name of examination;
 - (2) Date of examination; and
 - (3) Rating/grade received.
- g. Documentation of experience, if applicable, including:
 - (1) Dates of relevant work experience;
 - (2) Location of relevant work experience;
 - (3) Name of employer who directed relevant work experience.

- 3. Fee: The applicant must submit the required license fee as specified in 180 NAC 11-016 along with the application and all required documentation.

11-005.04 All applications should clearly label any information considered proprietary and segregate such information from non-proprietary information to the extent possible (Neb. Rev. Stat. § 84-712.05(3) and Neb. Rev. Stat. § 87-502).

11-005.05 Reciprocity: A person who has a valid license or certification from a state which licenses or certifies persons who measure or mitigate radon in a certification or licensing program with requirements determined by the Department as comparable with the provisions of this may be licensed by the Department upon submission of an application as specified in 180 NAC 11-005 and 11-006, with a copy of the certification or license from the other state, along with the fee specified in 180 NAC 11-016.

11-005.06 Department Review: The Department will act within 150 days upon all completed applications for initial licensing.

11-005.07 Denial of Initial License: If an applicant for an initial license does not meet all of the requirements for a license, the Department will deny issuance of a license. If the applicant is found to have committed any act which would be grounds for denial of a license as listed in 180 NAC 11-012, the Department may deny issuance of a license. To deny a license, the Department will notify the applicant in writing of the denial and the reasons for the determination. The denial will become final 30 days after mailing the notice unless the applicant, within that 30-day period, requests a hearing in writing. The hearing will be conducted in accordance with the Administrative Procedure Act and 184 NAC 1, the Department's Rules of Practice and Procedure for Administrative Hearings.

11-005.08 Withdrawn Applications: An applicant for a license who withdraws his/her application or whose application is rejected by the Department will be allowed the return of his/her fee, except for a \$25 administrative fee to be retained by the Department.

11-005.09 Practice Prior to Credential: An individual who practices prior to issuance of a license is subject to assessment of an administrative penalty under 180 NAC 11-015 or such other action as provided in the statutes and regulations governing the credential.

11-005.10 Confidentiality: Social Security Numbers obtained under this section are not public information but may be shared by the Department for administrative purposes if necessary and only under appropriate circumstances to ensure against any unauthorized access to this information.

11-005.11 Address Information: Each license holder must notify the Department of any change to the address of record.

11-005.12 Non-English Documents: Any documents written in a language other than English must be accompanied by a complete translation into the English language. The translation must be an original document and contain the notarized signature of the translator. An individual may not translate his/her own documents.

11-006 INITIAL LICENSE FOR A BUSINESS OR LABORATORY LICENSE REQUIREMENTS FOR RADON MEASUREMENT TECHNICIANS

11-006.01 Measurement Business~~The following qualifications are required for initial licensure as a radon measurement technician:~~

- ~~1. The individual must submit an application that contains applicant name, social security number, mailing address (including city, state, and zip code) and phone number to the Department along with the fee specified in 180 NAC 11-017.~~
- ~~2. Within four years prior to application, the individual must have successfully completed a training course and passed an examination on radon~~

~~measurements approved by the Department under the requirements specified in 180 NAC 11-014.~~

~~3. The individual must meet the proficiency requirements of 180 NAC 11-013.01. 11-006.01A Measurement Business Supplemental Documentation: The following information must be submitted along with the Business Application.~~

- ~~1. A quality assurance plan describing each measurement service and technique to be provided by the applicant to include at a minimum;~~
 - ~~a. A policy statement committing to provide quality work;~~
 - ~~b. A list detailing which individuals or organizations measurement reports are sent or made available to;~~
 - ~~c. A description of the business's management and organizational structure;~~
 - ~~d. Identification of all personnel involved in the measurement work and a description of their individual roles and responsibilities;~~
 - ~~e. An explanation of the method(s) to be used to determine indoor radon levels and a description of the passive, active and/ or electronic devices to be used. All radon measurement devices must be approved by the National Environmental Health Association, the National Radon Safety Board, or a national proficiency program approved by the Department.~~
 - ~~f. Samples of reports and all other radon-related materials given or mailed to clients, including any guidance provided concerning the need for further measurement or mitigation.~~
 - ~~g. A description of sampling methods to be used when conducting radon measurements. Sampling methods must follow, at a minimum, protocols referenced in 180 NAC 11-004.01(5) a.~~
 - ~~h. A description of the protocols to be used to prepare, evaluate and respond to the findings of quality control samples such as duplicates, blanks, and spikes as described in protocols referenced in 180 NAC 11-004.01(5)a, if applicable;~~
 - ~~i. Protocols for calibration(s) of devices prior to use, including identification of the chamber providing calibration services, if other than the manufacturer. Such chambers must be approved by the National Environmental Health Association (NEHA) or the National Radon Safety Board (NRSB). All devices must be calibrated once per year.~~
 - ~~j. A description of who is responsible for making changes to the QA plan and ensuring that copies of the changes are distributed to necessary recipients. Must also include a list of who those recipients are;~~
 - ~~k. A statement indicating how radon related records and documents will be retained and maintained for a period of five years as required by 180 NAC 11-004.02.~~
 - ~~l. A statement indicating how indoor radon measurements will be manually corrected, if appropriate to the device being used.~~

m. A statement indicating who will be responsible for validating test results and the information that will be used to make this decision.

2. A health and safety program to keep each employee's exposure as low as reasonably achievable.

11-006.01B Measurement Business Application: To apply for a business license to practice radon measurement, the applicant must submit a complete application to the Department. A complete application includes all required documentation, the required fee, and a written application. Applications must be submitted to the Nebraska Radon Program, Department of Health and Human Services, P.O. Box 95026, Lincoln NE 68509-5026. Checks or money orders must be made payable to the Department of Health and Human Services. The applicant may obtain an application from the Department or construct an application that must contain the following information:

1. Applicant name and signature;
2. Business name;
3. Business mailing address (including city, state, and zip code);
4. Business Phone number;
5. Disciplinary Action, if applicable: A list of any disciplinary actions taken against the applicant's license (in any profession in Nebraska or another state) and a copy of the disciplinary action(s), including charges and disposition; and
6. Name(s) and license number(s) of Specialists on staff.
7. The applicant must submit the required license fee as specified in 180 NAC 11-016 along with the application and all required documentation.

11-006-02 Mitigation Business

11-006-02A Mitigation Business Supplemental Documentation: The following information must be submitted along with the Business Application.

1. Description of all mitigation materials and systems offered, diagnostic tests performed, and other related services offered.
2. Identification of procedures and instrumentation used to perform diagnostic tests.
3. A health and safety program to limit employees' exposure to radon during the course of their employment. Such a program must include measures to keep each employee's exposure as low as reasonably achievable and must meet the requirements specified in 180 NAC 11-009.07.
5. A quality assurance plan which must include, at a minimum:
 - a. A policy statement committing to provide quality work;
 - b. A list detailing which individuals or organizations mitigation reports are sent or made available to;

- c. A description of management and structure of the business;
- d. Identification of personnel involved in the work, and their individual roles and responsibilities;
- e. Samples of reports mailed to clients, including any warranty information, guidance provided concerning the need for further measurement, or necessary maintenance to the mitigation system.
- f. A statement indicating how radon related records and documents will be retained and maintained for a period of five years as required by 180 NAC 11-004.03.

11-006.02B Mitigation Business Application: To apply for a business license to practice radon mitigation, the applicant must submit a complete application to the Department. A complete application includes all required documentation, the required fee, and a written application. Applications must be submitted to the Nebraska Radon Program, Department of Health and Human Services, P.O. Box 95026, Lincoln NE 68509-5026. Checks or money orders must be made payable to the Department of Health and Human Services. The applicant may obtain an application from the Department or construct an application that must contain the following information:

- 1. Applicant name and signature;
- 2. Business name;
- 3. Business mailing address (including city, state, and zip code);
- 4. Name(s) and license number(s) of Specialists on staff;
- 5. Business phone number;
- 6. Disciplinary Action, if applicable: A list of any disciplinary actions taken against the applicant's license (in any profession in Nebraska or another state) and a copy of the disciplinary action(s), including charges and disposition; and
- 7. The applicant must submit the required license fee as specified in 180 NAC 11-016 along with the application and all required documentation.

11-006.03 Radon Laboratories

11-006.03A Radon Laboratory Supplemental Documentation: The following information must be submitted along with the Radon Laboratory Application.

- 1. Proof of certification from the National Environmental Health Association, the National Radon Safety Board, or a national proficiency testing program approved by the Department.

11-006.03B Radon Laboratory Application: To apply for a license to operate as a radon laboratory, the applicant must submit a complete application to the Department. A complete application includes all required documentation, the required fee, and a written application. Applications must be submitted to the Nebraska Radon Program, Department of Health and Human Services, P.O. Box

95026, Lincoln NE 68509-5026. Checks or money orders must be made payable to the Department of Health and Human Services. The applicant may obtain an application from the Department or construct an application that must contain the following information:

1. A completed measurement business application form as specified in 180 NAC 11-006.01. Also include fees specified under 180 NAC 11-016.
2. At least one completed measurement specialist application form as specified in 180 NAC 11-005. Also include fees specified under 180 NAC 11-016.
3. A completed Radon Laboratory application. The applicant may obtain an application from the Department or construct an application that must contain the following information:
 - a. The applicant's name, address, and telephone number;
 - b. Identification by manufacturer and model number of all instrumentation to be used in radon analysis; and
 - c. The frequency and method of calibration of instruments.
4. No additional fee will be assessed for laboratory approval other than the fees submitted for measurement business and specialist applications.

11-007 APPROVED RADON TRAINING COURSES LICENSE REQUIREMENTS FOR RADON MITIGATION SPECIALIST

11-007.01 Approval of Radon Measurement Training Courses: To be approved as a radon measurement training course, a course must meet and maintain approval by the National Environmental Health Association (NEHA) or National Radon Safety Board (NRSB) as an entry level or initial radon measurement course and must meet for a minimum of 16 hours or apply for approval as an alternative measurement course. The following qualifications are required for initial licensure as a radon mitigation specialist:

1. The course provider must submit:
 - a. An application containing the course provider's name, address, phone number, and biographies of all individuals instructing participants in the training course.
 - b. Documentation showing approval from NEHA or NRSB specified in 180 NAC 11-007.01.
 - c. A copy of the certificate issued upon completion of the course.
2. To apply for approval as an alternative measurement course, a course provider must meet the following requirements:

- a. Submit an application containing the course provider's name, address, phone number, and biographies of all individuals instructing participants in the training course.
- b. Submit documentation that the course will meet for a minimum of 16 hours with instruction on the following topics:
 - (1) course objectives;
 - (2) radioactivity, radon, and radon's health effects;
 - (3) radon entry and behavior;
 - (4) radon measurement devices, techniques, and protocols;
 - (5) quality assurance and quality control;
 - (6) worker health and safety;
 - (7) measuring radon in water; and
 - (8) an overview of radon mitigation techniques.
- c. Provide an opportunity for course participants to evaluate the course instructor(s) and materials.
- d. Submit a copy of the certificate issued upon completion of the course.

11-007.02 Approval of Radon Mitigation Training Courses: To be approved as a radon mitigation training course, a course must meet and maintain approval by the National Environmental Health Association (NEHA) or National Radon Safety Board (NRSB) as an entry level or initial radon mitigation course and must meet for a minimum of 20 hours or apply for approval as an alternative mitigation course.

- 1. The course provider must submit:
 - a. An application containing the course provider's name, address, phone number, and biographies of all individuals instructing participants in the training course.
 - b. Documentation showing approval from NEHA or NRSB specified in 180 NAC 11-007.02.
 - c. A copy of the certificate issued upon completion of the course.
- 2. To apply for approval as an alternative mitigation course, a course provider must meet the following requirements:
 - a. Submit an application containing the course provider's name, address, phone number, and biographies of all individuals instructing participants in the training course.
 - b. Submit documentation that the course will meet for a minimum of 20 hours with instruction on the following topics:
 - (1) course objectives;
 - (2) radon mitigation system design, diagnostics, and installation;
 - (3) radon in water mitigation; and
 - (4) radon-resistant new construction.

- c. Provide an opportunity for course participants to evaluate the course instructor(s) and materials.
- d. Submit a copy of the certificate issued upon completion of the course.

11-007.03 Approval of Radon Examinations

1. To successfully pass an examination on radon measurements, an individual must achieve or exceed the minimum passing scores on an examination provided by the National Environmental Health Association (NEHA) or the National Radon Safety Board (NRSB).
2. To successfully pass an examination on radon mitigation, an individual must achieve or exceed the minimum passing scores on an examination provided by the National Environmental Health Association (NEHA) or the National Radon Safety Board (NRSB).
- ~~1. The individual must submit an application that contains applicant name, social security number, mailing address (including city, state, and zip code) and phone number to the Department along with the fee specified in 180 NAC 11-017.~~
- ~~2. The applicant must possess any combination of two years of relevant post-secondary education or relevant work experience.~~
 - ~~a. Relevant post-secondary education means a curriculum in architecture, engineering, building construction, physical sciences, or related disciplines. One year of post-secondary education will consist of a minimum of 24 semester hours, of which at least ten hours must be in the above subject areas, or 36 quarter hours, of which at least 15 hours must be in the above subject areas.~~
 - ~~b. Relevant work experience means the design, construction and renovation of buildings, or associated heating, ventilation, and air conditioning systems.~~
- ~~3. Within four years prior to application, the individual must have successfully completed training courses on radon measurement and mitigation and passed examinations on radon measurement and mitigation approved by the Department under the requirements specified in 180 NAC 11-014.~~
- ~~4. The individual must meet the proficiency requirements of 180 NAC 11-013.02.~~
- ~~5. The individual must be at least the age of majority upon application.~~

11-008 CONTINUING COMPETENCY: Each person holding an active license within the state must, on or before the date of expiration of the license, comply with the continuing competency requirements for his/her profession. Except as otherwise provided in 180 NAC 11-011.04 and 11-011.05; the Department will not renew the license of any person who has not complied with

these requirements. Each licensed individual is responsible for maintaining certificates or records of continuing competency activities.~~LICENSE REQUIREMENTS FOR RADON MITIGATION TECHNICIANS~~

11-008.01 Requirements for Continuing Competency: To maintain a license, an individual must meet the following requirements: ~~The following qualifications are required for initial licensure as a radon mitigation technician:~~

1. A licensed individual must complete at least six hours of radon courses, seminars, or meetings offered or approved by the Department by the expiration date of the license.
2. Instructors of radon-related courses or seminars may apply to the Department for continuing education credit, which will be determined by the Department. To receive continuing education credit for instruction, the person requesting credit must submit to the Department the following information:
 - a. Name, address, and telephone number of the instructor;
 - b. Biography or credentials of instructor;
 - c. Type of course, frequency of course offerings, total hours of supervised instruction, and an agenda outlining the hours of instruction, describing the subject matter to be included; and
 - d. A copy of the certificate issued upon completion of the course.
3. Continuing education credit will only be valid for the licensing period in which it was received. Credit will not be granted for attendance of a duplicate course during the licensing period.
4. Exemptions:
 - a. If an individual holds a measurement and a mitigation license, a minimum of eleven hours of continuing education must be completed by the expiration date of the licenses.
 - b. If an individual attends an approved radon measurement or mitigation training course after initial licensure, the continuing education credit earned remains valid for three years from date of course attendance.

11-008.02 Approval of Continuing Competency Courses

1. A course, workshop, or seminar about radon offered or sponsored by the Department will be accepted for the number of credits listed by the Department.
2. A course, workshop, or seminar about radon offered or approved by the National Environmental Health Association or the National Radon Safety Board will be accepted for the number of credits listed by the respective organization.
3. A course, workshop, or seminar about radon, not meeting the requirements of 180 NAC 11-008.04 item 1 or 2, that is attended or taught by the licensee will be accepted towards one hour of continuing education per hour of instruction and must apply for credit by submitting the following:

- a. Name, address, and telephone number of applicant;
 - b. Biography or credentials of instructor;
 - c. Type of course, frequency of course offerings, total hours of supervised instruction, and an agenda outlining the hours of instruction, describing the subject matter to be included; and
 - d. A copy of the certificate issued upon completion of the course.
- ~~1. The individual must submit an application that contains applicant name, social security number, mailing address (including city, state, and zip code) and phone number to the Department along with the fee specified in 180 NAC 11-017.~~
 - ~~2. The individual must have attained a minimum of one year experience in the building or construction trades. For purposes of 180 NAC 11, experience in the installation of mitigation systems under the supervision of a radon mitigation specialist will qualify as building experience.~~
 - ~~3. Within four years prior to application, the individual must have successfully completed a training course and passed an examination on radon mitigation approved by the Department under the requirements specified in 180 NAC 11-014.~~
 - ~~4. The individual must meet the proficiency requirements of 180 NAC 11-013.02.~~

11-009 MITIGATION SYSTEM INSTALLATION REQUIREMENTS LICENSE REQUIREMENTS FOR RADON MEASUREMENT BUSINESSES

11-009.01 These requirements for installation of radon mitigation systems provide a basis for evaluating the quality of such installations. It provides the basis against which in-progress or completed inspections will be evaluated.
The following are the requirements for licensure as a radon measurement business:

- ~~1. Submission of an application for a license which contains the applicant name, business name, mailing address (including city, state, zip code) and phone number to the Department, along with the fee specified in 180 NAC 11-017.~~
- ~~2. Description of all radon and radon measurement techniques or related services to be offered, including the purpose of each measurement service, the type and purpose of measurement equipment to be used in performing the service, and an explanation of how that equipment and procedure will meet the intended purpose.~~
- ~~3. Identification of radon measurement specialists and radon measurement technicians to be used by the business. The radon measurement business must maintain on staff or retain as a consultant a radon measurement specialist. All radon testing, including post mitigation testing, will be performed only by radon measurement specialists or radon measurement~~

~~technicians. This includes the initial placement and final retrieval of all measurement devices. The radon measurement specialist will direct the applicant's measurement activities and must review, approve, sign, and submit monthly reports to the Department containing the information specified in 180 NAC 11-015.01, inform clients of radon levels in accordance with the provisions of 180 NAC 11-015, assess quality assurance and quality control measures, evaluate operating procedures, and ensure compliance with state and federal regulations. The radon measurement specialist must be present during scheduled visits by the Department and must physically observe each radon measurement technician in the performance of his/her measurement duties at least once each calendar quarter to ensure adequate supervision. If no radon measurements are performed during an entire calendar quarter by any of the radon measurement technicians working for a radon measurement business, the visit and observation by the specialist are not required for that quarter. The quarterly visit and observations by the specialist must be resumed within the same calendar quarter in which measurement activities are resumed. The interval between visits and observations by the specialist must not exceed one year.~~

- ~~4. If a radon measurement business loses its radon measurement specialist, the radon measurement business must notify the Department in writing within five business days. The radon measurement business must obtain another radon measurement specialist within 30 days of the loss of the radon measurement specialist. Under this provision, the radon measurement business must not operate more than 60 days in any one calendar year without a radon measurement specialist.~~
- ~~5. Identification of the analytical laboratory to be used that has been determined proficient by the Department specified in 180 NAC 11-011. The radon measurement business must notify the Department in writing within five business days of any change in the analytical laboratory used.~~
- ~~6. Development, disclosure, and adherence to a plan of quality control for each service and technique provided by the applicant to assure the reliability and validity of radon measurements.~~
- ~~7. Disclosure of all sample reporting forms mailed to clients, including any guidance provided concerning the need for further measurement or mitigation.~~
- ~~8. Disclosure of copies of current publications and advertisements of radon-related services made by the applicant.~~
- ~~9. Development, disclosure, and adherence to a health and safety program. Such a program must include measures to keep each employee's exposure as low as reasonably achievable.~~
- ~~10. Maintenance of the following records for five years:~~

- ~~a. Records of all radon tests performed;~~
- ~~b. Records of instrument calibrations and quality control;~~
- ~~c. Records of completing proficiency requirements specified in 180 NAC 11-013, including completion of continuing education courses;~~
- ~~d. Records of employee exposure to radon during employment;~~
- ~~e. Copies of licenses for radon measurement specialists and radon measurement technicians employed or used as consultants.~~

11-009.02 Radon mitigation specialists are responsible for all radon mitigation systems installed by their firm or its subcontractors to ensure compliance with the requirements of 180 NAC 11-009.

11-009.03 Limitations

1. Where discrepancies exist between provisions of 180 NAC 11 and local codes or regulations, local codes will take precedence, except that the local codes will not take precedence with regard to alterations that may adversely impact the radon reduction functions for which such systems were originally designed and may adversely impact public health and safety regarding exposure to a radioactive element. Where discrepancies exist between provisions of 180 NAC 11 and local codes or regulations, such as local plumbing, heating and cooling or electrical codes, the stricter code will apply unless there is an adverse impact on the radon reduction functions for which the system was originally designed.
2. Compliance with these requirements does not guarantee reduction of indoor radon concentrations to any specific level.
3. The requirements specified in 180 NAC 11-009 will not apply to radon mitigation systems installed prior to April 6, 2003. However, if a radon mitigation system is found that does not comply with current standards, the licensee must recommend in writing to the client that the system be upgraded or altered to meet current standards. The licensee must obtain prior approval from the client before implementing any of the licensee's written recommendations.
4. Because of the wide variation in building design, size, operation and use, these requirements do not include detailed guidance on how to select the most appropriate mitigation strategy for a given building.

11-009.04 General Practices: The following general practices are required for all contacts between radon mitigation licensees and clients:

1. In the initial contact with a client, the specialist must review any available results from previous radon measurements to assist in developing an appropriate mitigation strategy. The specialist must inform the client when it is determined that previous radon measurements were not performed according to EPA protocols and must recommend retesting.

2. Based on guidance contained in US EPA's "A Citizen's Guide to Radon (Second Edition)," or subsequent revisions of that document, the licensee must refer the client to the discussions of interpreting indoor radon test results and the health risk associated with the radon level found in the building. The US EPA's "Consumer's Guide to Radon Reduction," is an appropriate reference for providing advice on actions to take to reduce indoor radon levels.
3. In dwellings with levels exceeding 100 pCi/l, the mitigation specialist must advise the client of temporary measures that can be used to reduce occupant exposure until a permanent mitigation system is installed. This may include temporary measures such as natural ventilation, mechanical ventilation with unconditioned outside air, limiting the occupants' exposure by minimizing the time spent in areas of the home with elevated radon levels, or any measures which effectively minimize occupant exposure.
 - a. The mitigation specialist must not install a temporary system in lieu of a permanent mitigation system.
 - b. Temporary radon reduction systems must be labeled as such. The label must be readable from at least three feet and must include a statement that the system is temporary and that it will be replaced with a permanent system within 30 days after the installation date of the temporary system. The label must also include the licensee's name, license number, phone number, and the installation date.
 - c. If the equipment is not easily labeled, the notice must be posted on the electric service panel, or other prominent location.

11-009.05 The mitigation business must provide the following written information to the client prior to initiating any work:

1. The mitigation business license number,
2. The scope of the work to be completed including an estimate of the time needed to complete the work,
3. A statement indicating any known hazards associated with chemicals used in or as part of the installation and the potential need to ventilate work areas during and after the use of such materials,
4. An estimate of the installation cost and annual operating cost of the system, and
5. A statement indicating compliance with provisions of the Act, Title 180, and all other related municipal, county, state and federal laws and regulations.

11-009.06 Building Investigation

1. The licensee must conduct a thorough visual inspection of the building prior to initiating any radon mitigation work. The inspection is intended to identify any specific building characteristics and configurations (e.g., large cracks in slabs, exposed earth in crawlspaces, open stairways to basements) and operational conditions (e.g., continuously running HVAC systems or operational windows)

that may affect the design, installation, and effectiveness of radon mitigation systems.

2. As part of the building investigation, a floor-plan sketch must be developed (if not already in existence and readily available) that includes illustrations of the building foundation (slab-on-grade, basement, or crawlspace area.) The sketch should include the location of load-bearing walls, drain fixtures, and HVAC systems. It should be annotated to include suspected or confirmed radon entry points, results of any diagnostic testing, the anticipated layout of any radon mitigation system piping, and the anticipated locations of any vent fan and system warning devices for the envisioned mitigation systems. The sketch must be finalized during installation and must be included in the documentation specified in 180 NAC 11-009.13.

11-009.07 Worker Health and Safety: The following requirements that are specifically or uniquely applicable for the safety and protection of radon mitigation workers must be met:

1. The licensee must advise workers of the hazards of exposure to radon and the importance of protective measures when working in areas of elevated radon concentrations.
2. The licensee must have a worker protection plan on file that is available to all employees. Exception: A worker protection plan is not required for a licensee who is a sole proprietor unless required by local regulations.
3. Work areas must be ventilated to reduce worker exposure to radon decay products, dust, or other airborne pollutants. In work areas where ventilation is impractical or where ventilation cannot reduce radon levels to less than 0.3 WL or 30 pCi/l (based on a short-term diagnostic test), the licensee must ensure that appropriate respiratory protection is used.
4. Pending the development of an approved personal radon exposure device and a protocol for its use, licensees must record employee exposure to radon at each work site, based on the highest pre-mitigation indoor radon or working level measurement available and the time employees are exposed (without respirator protection) at that level unless on-site radon or radon decay product measurements are used to determine exact exposure.
5. Licensees must ensure that employees are exposed to no more than 4 working level months (WLM) over a 12 month period. (An equilibrium ratio of 50% must be used to convert radon exposure to WLM.)
6. In any planned work area where it is suspected that friable asbestos may exist and be disturbed, radon mitigation work must not be conducted until a determination is made by a properly trained or accredited person that such work will be undertaken in a manner which complies with applicable asbestos regulations.

7. Licensees must advise employees of the potential hazards, of the materials and supplies used, and to provide applicable Material Safety Data Sheets (MSDS) and explain the required safety procedures.

11-009.08 Systems Design

1. All radon mitigation systems must be designed by a licensed radon mitigation specialist, and installed as permanent, integral additions to the building, except where a temporary system has been installed in accordance with 180 NAC 11-009.04 or if an exemption is applied for and approved by the Department.
2. All radon mitigation systems must be designed to avoid the creation of other health, safety, or environmental hazards to building occupants, such as back drafting of natural draft combustion appliances.
3. All radon mitigation systems must be designed to maximize radon reduction while minimizing excess energy usage, avoiding compromise of moisture and temperature controls and other comfort features, and minimizing noise.

11-009.09 Systems Installation

1. Radon Vent Pipe Installation Requirements
 - a. All vent stack piping must be solid, rigid, plastic pipe not less than 3 in. (75 cm) inside diameter (ID).
 - b. All joints and connections in radon mitigation systems using plastic vent pipes must be permanently sealed with adhesives as specified by the manufacturer of the pipe material used. Exceptions include when installing vent pipes in sumps specified in 180 NAC 11-009.09, item 1(g) and when installing fans specified in 180 NAC 11-009.09, item 2(g). Joints or connections in other vent pipe materials must be made air tight.
 - c. Radon vent pipes must be fastened to the structure of the building with hangers, strapping, or other supports that will adequately secure the vent material. Existing plumbing pipes, ducts, or mechanical equipment must not be used to support or secure a radon vent pipe.
 - d. Supports for radon vent pipes must be installed at least every six feet on horizontal runs. Vertical runs must be secured either above or below the points of penetration through floors, ceilings, and roofs, or at least every eight feet on runs that do not penetrate floors, ceilings, or roofs.
 - e. To prevent blockage of air flow into the bottom of radon vent pipes, these pipes must be supported or secured in a permanent manner that prevents their downward movement to the bottom of suction pits or sump pits, into the soil beneath an aggregate layer under a slab, or into the soil

beneath a soil-gas-retarder membrane.

- f. Radon vent pipes must be installed in a configuration that ensures that any rain water or condensation within the pipes drains downward into the ground beneath the slab or soil-gas retarder membrane.
- g. Radon vent pipes must not block access to any areas requiring maintenance or inspection. Radon vents must not be installed in front of or interfere with any light, opening, door, window or equipment access area required by code. If radon vent pipes are installed in sump pits, the system must be designed with removable or flexible couplings to facilitate removal of the sump pit cover for sump pump maintenance.
- h. To prevent re-entrainment of radon, the point of discharge from vents of fan-powered soil depressurization and block wall depressurization systems must meet all of the following requirements: (1) be vertical and upward above the eave of the roof, (2) be ten feet or more above ground level, (3) be ten feet or more from any window, door, or other opening into conditioned spaces of the structure that is less than two feet below the exhaust point, (4) be ten feet or more from any opening into an adjacent building. The total required distance (ten feet) from the point of discharge to openings in the structure may be measured either directly between the two points or be the sum of measurements made around intervening obstacles. Whenever possible, the exhaust point should be positioned above the highest eave of the building and as close to the roof ridge line as possible.

2. Radon Vent Fan Installation Requirements

- a. Vent fans used in radon mitigation systems must be designed specifically for radon removal applications and must be designed or otherwise sealed to reduce the potential for leakage of soil gas from the fan housing.
- b. Radon vent fans must be sized to provide the pressure difference and air flow characteristics necessary to achieve the radon reduction goals established for the specific mitigation project.
- c. Radon vent fans used in active soil depressurization or block wall depressurization systems must not be installed below grade nor in the conditioned (heated/cooled) space of a building, nor in any basement, crawlspace, or other interior location directly beneath the conditioned spaces of a building. Acceptable locations for radon vent fans include attics not suitable for occupancy (including attics over living spaces and garages), garages that are not beneath conditioned spaces, or on the exterior of the building.
- d. Radon vent fans must be installed in a configuration that avoids

condensation buildup in the fan housing. Fans must be installed in vertical runs of the vent pipe.

- e. Radon vent fans mounted on the exterior of buildings must be rated for outdoor use or installed in a water tight protective housing.
- f. Radon vent fans must be mounted and secured in a manner that minimizes transfer of vibration to the structural framing of the building.
- g. To facilitate maintenance and future replacement, radon vent fans must be installed in the vent pipe using removable couplings or flexible connections that can be tightly secured to both the fan and the vent pipe.
- h. The intakes of fans used in crawlspace pressurization, or in pressurizing the building itself, must be screened or filtered to prevent ingestion of debris or personal injury. Screens or filters must be removable to permit cleaning or replacement and building owners must be informed of the need to periodically replace or clean such screens and filters. This information must also be included in the documentation specified in 180 NAC 11-009.13.

3. Suction Pit Requirement for Sub-Slab Depressurization (SSD) Systems

- a. To provide optimum pressure field extension of the sub slab communication zone, adequate material must be excavated from the area immediately below the slab penetration point of SSD system vent pipes.

4. Sealing Requirements

- a. Sump pits that permit entry of soil-gas or that would allow conditioned air to be drawn into a sub-slab depressurization system must be covered and sealed with materials specified in 180 NAC 11-009.10, item 7. The covers on sumps that previously provided protection or relief from surface water collection must be fitted with a water or mechanically trapped drain.
- b. Openings around radon vent pipe penetrations of the slab, the foundation walls, or the crawlspace soil-gas retarder membrane must be cleaned, prepared, and sealed in a permanent, air-tight manner using compatible caulks or other sealant materials as specified in 180 NAC 11-009.10, item 5. Openings around other utility penetrations of the slab, walls, or soil-gas retarder must also be sealed.
- c. Where a Block Wall Depressurization (BWD) system is used to mitigate radon, openings in the tops of such walls and all accessible openings or cracks in the interior surfaces of the walls must be closed and sealed with polyurethane or equivalent caulks, expandable foams, or other fillers

and sealants as specified in 180 NAC 11-009.10, items 5 and 6. Openings or cracks that are determined to be inaccessible or beyond the ability of the licensee to seal must be disclosed to the client and included in the documentation specified in 180 NAC 11-009.13.

- d. Openings, perimeter channel drains, or cracks that exist where the slab meets the foundation wall (floor-wall joint), must be sealed with urethane caulk or equivalent material. When the opening or channel is greater than 1/2 inch in width, a foam backer rod or other comparable filler material must be inserted in the channel before application of the sealant. This sealing technique must be done in a manner that retains the channel feature as a water control system. Openings or cracks that are determined to be inaccessible or beyond the ability of the licensee to seal must be disclosed to the client and included in the documentation.
- e. When installing baseboard-type suction systems, all seams and joints in the baseboard material must be joined and sealed using materials recommended by the manufacturer of the baseboard system. Baseboards must be secured to walls and floors with adhesives designed and recommended for such installations. If a baseboard system is installed on a block wall foundation, the tops of the block wall must be closed and sealed as prescribed in 180 NAC 11-012.09, item 4(c).
- f. Any seams in soil-gas retarder membranes used in crawlspaces for sub-membrane depressurization systems must be overlapped at least 12 inches and must be sealed. To enhance the effectiveness of sub-membrane depressurization systems, the membrane must also be sealed around interior piers and to the inside of exterior walls to the extent possible.
- g. In combination basement/crawlspace foundations, where the crawlspace has been confirmed as a source of radon entry, access doors and other openings between the basement and the adjacent crawlspace must be closed and sealed. Access doors required by code must be fitted with air tight gaskets and a means of positive closure, but must not be permanently sealed. In cases where both the basement and the adjacent crawlspace areas are being mitigated with active SSD and SMD systems, sealing of the openings between those areas is not required.
- h. When crawlspace depressurization is used for radon mitigation, openings and cracks in floors above the crawl-space which would permit conditioned air to pass out of the living spaces of the building, must be identified, closed, and sealed. Sealing of openings around hydronic heat or steam pipe penetrations must be done using non-combustible materials. The presence of openings or cracks that are inaccessible or beyond the ability of the licensee to seal must be disclosed to the client. This information must also be included in the documentation specified in

180 NAC 11-009.13.

5. Electrical Requirements

- a. Wiring may not be located in or chased through the mitigation installation ducting or any other heating or cooling ductwork.
- b. Any plugged cord used to supply power to a radon vent fan must be no longer than six feet in length.
- c. No plugged cord may penetrate a wall or be concealed within a wall.
- d. Radon mitigation fans installed on the exterior of buildings must be hard-wired into an electrical circuit. Plugged fans must not be used outdoors.
- e. If the rated electricity requirements of a radon mitigation system fan exceed 50% of the circuit capacity into which it will be connected, or if the total connected load on the circuit (including the radon vent fan) exceeds 80% of the circuit's rated capacity, a separate, dedicated circuit must be installed to power the fan.
- f. An electrical disconnect switch or circuit breaker must be installed in radon mitigation system fan circuits to permit deactivation of the fan for maintenance or repair (Disconnect switches are not required with plugged fans).

6. Drain Installation Requirements

- a. If condensate drains from air conditioning units terminate beneath the floor slab, the licensee must install a trap in the drain that provides a minimum six-inch standing water seal depth, reroute the drain directly into a trapped floor drain, or reconnect the drain to a condensate pump.
- b. When a sump pit is the only system in a basement for protection or relief from excess surface water and a cover is installed on the sump for radon control, the cover must be recessed and fitted with a trapped drain meeting the requirements specified in 180 NAC 11-009.09, item 6(a).

7. HVAC Installation Requirements

- a. Modifications to an existing HVAC system, which are proposed to mitigate elevated levels of radon, should be reviewed and approved by the original designer of the system (when possible) or by a licensed mechanical contractor.
- b. Foundation vents, installed specifically to reduce indoor radon levels by increasing the natural ventilation of a crawlspace, must be non-closeable. In areas subject to freezing conditions, water supply and other kinds of pipes or equipment, which could be damaged by freezing must be insulated or otherwise protected from freezing.
- c. Heat Recovery Ventilation (HRV) systems must not be installed in areas

of the building that contain friable asbestos.

- d. In HRV installations, supply and exhaust ports in the interior must be located a minimum of 12 feet apart. The exterior supply and exhaust ports must be positioned a minimum of 12 inches (30 cm) above the ground to avoid blockage by snow or leaves and be a minimum of 10 feet apart. Exterior supply /intake ports must be located away from areas where stored material or equipment could block airflow. Exterior supply/intake ports must be kept away from where car and truck exhaust or other air pollutants may be present.
- e. Licensees installing HRV systems must verify that the incoming and outgoing airflow is balanced to ensure that the system does not create a negative pressure within the building. Licensees must inform building owners that periodic filter replacement and inlet grill cleaning are necessary to maintain a balanced airflow. This information must also be included in the documentation specified in 180 NAC 11-009.13.
- f. Both internal and external intake and exhaust vents in HRV systems must be covered with wire mesh or screening to prevent entry of animals or debris or injury to occupants.

11-009.10 Materials

- 1. All mitigation system electrical components must be U.L. listed or of equivalent specifications.
- 2. All plastic vent pipes in mitigation systems must be made of Schedule 20 PVC, ABS or equivalent piping material.
- 3. Vent pipe fittings in a mitigation system must be of the same material as the vent pipes unless flexible, airtight rubber couplings are used when installing vent fans or when installing radon vent pipes in sump pit covers.
- 4. Cleaning solvents and adhesives used to join plastic pipes and fittings must be as recommended by manufacturers for use with the type of pipe material used in the mitigation system.
- 5. When sealing cracks in slabs and other small openings around penetrations of the slab and foundation walls, caulks and sealants designed for such application must be used.
- 6. When sealing holes for plumbing rough-in or other large openings in slabs and foundation walls that are below the ground surface, non-shrink mortar, grouts, expanding foam, or similar materials designed for such application must be used.
- 7. Sump pit covers must be made of durable plastic or other rigid material and

designed to permit air-tight sealing. To permit easy removal for sump pump servicing, the cover must be sealed using silicone or other non-permanent type caulking materials or an air-tight gasket.

8. Penetrations of sump covers to accommodate electrical wiring, water ejection pipes, or radon vent pipes must be designed to permit air-tight sealing around penetrations, using caulk or grommets.
9. Plastic sheeting installed in crawlspaces as soil-gas retarders must be a minimum of 6 mil (3 mil cross-laminated) polyethylene or equivalent flexible material.
10. Any wood in contact with soil or concrete and is used in attaching soil-gas retarder membranes to crawlspace walls or piers must be pressure treated or naturally resistant to decay and termites.

11-009.11 Monitors and Labeling

1. All active soil depressurization and block wall depressurization radon mitigation systems must include a mechanism to monitor system performance and warn of system failure. The mechanism must be simple to read or interpret and be located where it is easily seen or heard by building occupants and protected from damage or destruction.
2. Electrical radon mitigation system monitors (whether visual or audible) must be installed on non-switched circuits and be designed to reset automatically when power is restored after service or power supply failure. Battery operated monitoring devices may not be used unless they are equipped with a low power warning feature.
3. Mechanical radon mitigation system monitors, such as manometer type pressure gauges, must be clearly marked to indicate the range or zone of pressure readings that existed when the system was initially activated.
4. One central system description label must be placed on the mitigation system, above the suction point or sump pit between two and six feet from the floor. This label must be legible from a distance of at least three feet and include the following information: "Radon Reduction System," the installer's name, phone number, and license number, the date of installation, and an advisory that the building should be tested for radon at least every two years or as required or recommended by state or local agencies. In addition, all visible radon mitigation system vent pipe sections must be identified with at least one label on each floor level. The label will read, "Radon Reduction System."
5. The circuit breakers controlling the circuits on which the radon vent fan and system failure warning devices operate must be labeled "Radon Reduction System."

11-009.12 Post-Mitigation Testing

1. After installation of an active radon control system (e.g., SSD), the licensee must re-examine and verify the integrity of the fan mounting seals and all joints in the interior vent piping.
2. After installation of any active radon mitigation system, the licensee must measure suction or flows in system piping or ducting to assure that the system is operating as designed.
3. Immediately after installation and activation of any active (fan-powered) sub-slab depressurization or block wall depressurization system in buildings containing natural draft combustion appliances, the building must be tested for backdrafting of those appliances. Any backdrafting condition that results from installation of the radon mitigation system must be corrected before the system is placed in operation.

The following checklist has been extracted from various references and may be used to test for existing or potential backdrafting conditions:

- a. Close all windows and doors, both external and internal.
 - b. Open all HVAC supply and return air duct vents/registers.
 - c. Close fireplace and wood stove dampers.
 - d. Turn on all exhaust and air distribution fans and combustion appliances EXCEPT the appliance being tested for backdrafting.
 - e. Wait five minutes.
 - f. To begin a test for actual spillage of flue gases, turn on the appliance being tested. (If the appliance is a forced air furnace, ensure that the blower starts to run before proceeding.)
 - g. Using either a smoke tube or a carbon dioxide gas analyzer, check for flue gas spillage near the vent hood after the appliance has been running five minutes.
 - h. Repeat steps (d) through (g) for each natural draft combustion appliance being tested for backdrafting. Seasonal and extreme weather conditions should be considered when evaluating pressure differentials and the potential for backdrafting.
 - i. If spillage is confirmed from any natural draft combustion appliance, clients must be advised of the backdrafting condition and that active (fan-powered) radon mitigation systems cannot be installed until the condition has been corrected. Licensees should advise the client to contact an HVAC contractor if correcting an existing or potential backdrafting condition is necessary.
4. Upon completion of radon mitigation work, the licensee must take steps to ensure that the effectiveness of the radon reduction system is demonstrated using one of two approaches: 1) the licensee leaves an approved radon test kit with the homeowner and instructs that person, in writing, that a radon test should be performed using the supplied radon test kit or any other approved

test kit or 2) the required radon test is performed by a licensed radon measurement specialist. If the mitigation specialist is licensed as a measurement specialist and conducts the test, and the homeowner accepts the test results as satisfactory evidence of system effectiveness, further post-mitigation testing is not required. However, to avoid the appearance of conflict of interest, the licensee must recommend to the homeowner that a post-mitigation measurement be conducted by an independent licensed radon measurement specialist or by the homeowner.

5. Post-mitigation tests must be of sufficient type, duration, and consistency to allow for comparison of pre- and post-mitigation levels. The post-mitigation test must be started no sooner than 24 hours, nor longer than 30 days after mitigation. All measurements must be conducted in accordance with the requirements of 180 NAC 11-004.02 item 1.

11-009.13 Homeowner Information Package: Upon completion of the mitigation project, the licensee must provide the homeowner with an information package. Such package must be affixed to the mitigation system vent pipe above the suction point or sump pit between two and six feet from the floor. Such package must include:

1. Any building permits required by local codes.
2. Copies of the Building Investigation Summary and floor plan sketch.
3. Any available pre-and post-mitigation radon test data.
4. Copies of contracts and warranties.
5. A description of the mitigation system installed and its basic operating principles.
6. A description of any deviations from 180 NAC 11 that has been approved by the Department.
7. A description of the proper operating procedures of any mechanical or electrical systems installed, including manufacturer's operation and maintenance instructions and warranties.
8. A list of appropriate actions for clients to take if the system failure warning device indicates system degradation or failure.
9. The name, telephone number, and license numbers of the radon mitigation specialist installing the system, and the phone number of the state radon office.
10. A recommendation to retest the building at least every two years or if the building undergoes significant alteration.

11-010 REPORTING REQUIREMENTS LICENSE REQUIREMENTS FOR RADON MITIGATION BUSINESSES

11-010.01 A radon measurement business or approved analytical laboratory must submit to the Department, by the 15th day of each month, the results of all radon measurements performed in the State of Nebraska during the previous month. The absence of radon

measurements must be reported monthly to the Department. The following are the requirements for licensure as a radon mitigation business:

1. Residential radon measurement reports must contain the following:

- a. Name of property owner, and street address (including city, state, and Zip Code).
- b. Name of person performing measurement, testing dates, total time of measurement in hours, location of test device (including story and room), type of test device, device identification number, whether a radon mitigation system is present, and radon test results.
- c. Name and license number of radon measurement business and radon measurement specialist.

2. Nonresidential radon measurement reports must contain the following:

- a. Name of facility, type of facility, street address (including city, state, and Zip Code) and phone number, name of contact person, name of property owner.
 - b. Name of person performing measurement, testing dates, total time of measurement in hours, location of test device (including story and room), type of test device, device identification number, whether a radon mitigation system is present, and radon test results.
 - c. Name and license number of radon measurement business and radon measurement specialist.
- ~~1. Submission of an application for a license which contains the applicant name, business name, mailing address (including city, state, and zip code) and phone number to the Department, along with the fee specified in 180 NAC 11-017.~~
 - ~~2. Description of all mitigation materials and systems offered, diagnostic tests performed, and other related services offered.~~
 - ~~3. Identification of the radon mitigation specialists and radon mitigation technicians to be used by the business.~~
 - ~~4. Identification of procedures and instrumentation used to perform diagnostic tests.~~
 - ~~5. Disclosure of all reporting forms mailed to clients.~~
 - ~~6. Disclosure of copies of current publications and advertisements of radon-related services made by the applicant.~~
 - ~~7. Development, disclosure, and adherence to a health and safety program to limit employees' exposure to radon during the course of their employment. Such a program must include measures to keep each employee's exposure as~~

~~low as reasonably achievable and must meet the requirements specified in 180 NAC 11-012.07.~~

- ~~8. The radon mitigation business must maintain on staff or retain as a consultant a radon mitigation specialist. The radon mitigation specialist will direct the applicant's mitigation activities, and must review, approve, sign, and submit monthly reports to the Department containing the information specified in 180 NAC 11-015.04, evaluate operating procedures, ensure compliance with state and federal regulations, and be responsible for evaluating diagnostic tests in a building and designing mitigation systems. The mitigation specialist must be present during scheduled visits by the Department and must physically observe each radon mitigation technician in the performance of his/her mitigation duties at least once each calendar quarter to ensure adequate supervision.~~
- ~~9. If a radon mitigation business loses its radon mitigation specialist, the radon mitigation business must notify the Department in writing within five business days. The radon mitigation business must obtain another radon mitigation specialist within 30 days of the loss. Under this provision, the radon mitigation business must not operate more than 60 days in any one calendar year without a radon mitigation specialist. If no radon mitigation activities are performed during an entire calendar quarter by any of the radon mitigation technicians working for a radon mitigation business, the visit and observation by the specialist are not required for that quarter. The quarterly visit and observations by the specialist must be resumed within the same calendar quarter in which mitigation activities are resumed. The interval between visits and observations by the specialist must not exceed one year.~~
- ~~10. The radon mitigation business must assure that radon mitigation system installations are performed under the supervision of a radon mitigation specialist or radon mitigation technician.~~
- ~~11. The radon mitigation business will provide all warranty information on the reduction of the radon level, or the proper functioning of mitigation equipment in writing to clients. Nothing in 180 NAC 11-010.01, item 11. limits warranties applicable to any client pursuant to any state or federal law.~~
- ~~12. The radon mitigation business must maintain at a minimum the following records for five years:~~
 - ~~a. Records of all mitigation work performed, including client name, address, diagnostic test results, a description of each mitigation system and materials installed, pre-mitigation and post-mitigation measurements including method of measurement and all pertinent dates.~~
 - ~~b. Records of mitigation plans developed and signed by a radon mitigation specialist.~~

- ~~c. Records of all instrument calibrations, contracts, and warranties on equipment installed.~~
- ~~d. Records of completing proficiency requirements specified in 180 NAC 11-013, including completion of continuing education courses.~~
- ~~e. Records of employee exposure to radon during employment.~~
- ~~f. Copies of the licenses for radon mitigation specialists and radon mitigation technicians employed or used as consultants.~~

11-010.02 Radon measurement businesses and radon mitigation businesses must report test results for radon in writing to the client. Such reports must also include the date, test, name, and license number of the person who made the measurements. Radon results must be reported in picocuries per liter. Radon progeny results must be reported in working levels.

11-010.03 In addition, the radon measurement business must notify the client by telephone and mail within two business days of any measurement with results equal to or greater than 100 pCi/l or 0.5 WL and advise the client to contact the Department at 1-800-334-9491 or at other telephone numbers provided by the Department. The results of this measurement must also be provided to the Department by phone and mailed within the same two-business day period.

11-010.04 The radon mitigation business must submit to the Department, by the 15th day of each month, a report on all mitigation work completed during the previous month, including the floor plans and equipment arrangement of the mitigation system, or modifications of existing systems, and the mitigation fee(s) (per installation) as specified in 180 NAC 11-016.03. The absence of mitigation work must be reported monthly to the Department.

1. Residential radon mitigation reports must contain the following:

- a. Name of property owner, and street address (including city, state, and Zip Code).
- b. Pre-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).
- c. Post-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).
- d. Date mitigation completed and type of mitigation system(s) installed.
- e. Name and license number of radon mitigation business and radon mitigation specialist.

2. Nonresidential radon mitigation reports must contain the following:

- a. Name of facility, building street address (including city, state, and Zip Code), name and phone number of contact person, number of stories and number of occupied stories in building; name and address of property owner.

- b. Pre-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).
 - c. Post-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).
 - d. Date mitigation completed and type of mitigation system(s) installed.
 - e. Name and license number of radon mitigation business and radon mitigation specialist.
- 3. Fees specified in 180 NAC 11-016.03 must be submitted for each mitigation system installation. For fee calculation purposes, one mitigation installation is equivalent to any of the following:
 - a. Each individual house that has had a mitigation system installed or mitigation performed.
 - b. Each separate mitigation system or depressurization system in a nonresidential building or an apartment complex.

Example: Individual vent pipes from two suction points connected together to vent through one pipe, fan, and exhaust point is considered one system.

Example: Individual vent pipes from two suction points routed to vent through two separate pipes, fans, and exhaust points is considered two systems.

11-011 RENEWAL: An individual or business wishing to renew a radon measurement or mitigation license must request renewal as specified in 180 NAC 11-011.02. All radon measurement or mitigation licenses issued by the Department will expire on March 31 of each odd-numbered year (unless renewed as provided below.) No radon measurement or mitigation activity will be conducted after the expiration of the term of the license. APPROVAL OF RADON LABORATORIES

11-011.01 Renewal Notice: At least 30 days before the expiration of a license, the Department will notify each license holder at the last known address of record. The renewal notice will include: ~~To apply for radon laboratory approval, a person must do all the following:~~

- 1. The type of license;
 - 2. The license number;
 - 3. The expiration date;
 - 4. Continuing competency requirements for renewal;
 - 5. The amount of the renewal fee; and
 - 6. Information on how to request renewal and how to place a license on inactive status;
1. ~~Submit a completed measurement business application form provided by the Department. Also include fees specified under 180 NAC 11-017.~~

- ~~2. Submit at least one completed measurement specialist application form provided by the Department. Also include fees specified under 180 NAC 11-017.~~
- ~~3. Submit a completed laboratory application form provided by the Department. The laboratory application form will include but not be limited to the following information:~~
 - ~~a. The applicant's name, address, and telephone number;~~
 - ~~b. Identification by manufacturer and model number of all instrumentation to be used in radon analysis;~~
 - ~~c. The frequency and method of calibration of instruments; and~~
 - ~~d. Proof of laboratory certification required under 180 NAC 11-011.02.~~
- ~~4. No additional fee will be assessed for laboratory approval other than the fees submitted for measurement business and specialist applications.~~

11-011.02 Renewal Procedures for Individual Licenses: The request for renewal may be submitted in person or by mail, and must include all required documentation and the renewal fee, which must be paid no later than the expiration date. Renewal requests must be submitted to the Nebraska Radon Program, Department of Health and Human Services, P.O. Box 95026, Lincoln, NE 68509-5026. Checks or money orders must be made payable to the Department of Health and Human Services. The applicant may obtain an application from the Department or construct an application. ~~To be approved as a radon laboratory, a laboratory must have obtained laboratory certification from the National Environmental Health Association, the National Radon Safety Board, or a national proficiency testing program approved by the Department. To maintain approval as a radon laboratory, a laboratory must meet the requirements of 180 NAC 11-004, 11-009, 11-013, and 11-015.~~

1. Application: The applicant must attest that all information in the application is truthful and complete, and the applicant, in his/her application:
 - a. Must provide the following information:
 - (1) The legal name of the applicant, maiden name (if applicable), and any other names by which the applicant is known;
 - (2) Mailing address (street, rural route, or post office address; and city, state, and zip code, or country information);
 - (3) The applicant's:
 - (a) Social Security Number (SSN); or
 - (b) Alien Registration Number (A#) or
 - (c) Form I-94 (Arrival-Departure Record) number.

Certain applicants may have both a SSN and an A# or I-94 number, and if so, must report both.

- b. Must state that s/he is one of the following:
 - (1) A citizen of the United States;
 - (2) An alien lawfully admitted into the United States for permanent residence under the Immigration and Naturalization Act (INA) and who is eligible for a credential under the Uniform Credentialing Act; or

- (3) A non-immigrant whose visa for entry, or application for visa for entry, is related to such employment in the United States;
 - c. May provide the following information about him/herself:
 - (1) The applicant's telephone number including area code;
 - (2) The applicant's e-mail address;
 - (3) The applicant's fax number;
 - d. Must indicate that s/he:
 - (1) Is of good character;
 - (2) Has met the continuing competency requirements specified in 180 NAC 11-008 or has requested a waiver if s/he meets the requirements of 180 NAC 11-011.04 and 11-011.05; and
 - (3) Has not, since the last renewal of the license, committed any act which would be grounds for action against a license as specified in 180 NAC 11-012, or provide an explanation of all such acts.
 - (4) Respond to the following questions:
 - a. Has your license in any profession in another state been revoked, suspended, limited, or disciplined in any manner?
 - b. Have you been convicted of a misdemeanor or felony?

These questions relate to the time period since the last renewal of the license or during the time period since initial licensure in Nebraska if such occurred within the year prior to the license expiration date.

- 2. Documentation: The applicant must submit the following documentation with the application:
 - a. Alien or Non-Immigrant: Evidence of lawful permanent residence, and/or immigration status may include a copy of:
 - (1) An Alien Registration Receipt Card (Form I-551, otherwise known as a "Green Card");
 - (2) An unexpired foreign passport with an unexpired Temporary I-551 stamp bearing the same name as the passport;
 - (3) A document showing an Alien Registration Number ("A#") with visa status; or
 - (4) A Form I-94 (Arrival-Departure Record) with visa status;
 - b. Disciplinary Action: A list of any disciplinary actions taken against the applicant's license (in any profession in Nebraska or another state) and a copy of the disciplinary action(s), including charges and disposition;
 - c. Conviction Information: If the applicant has been convicted of a felony or misdemeanor since his/her last renewal or during the time period since initial credentialing if such occurred within the previous two years, the applicant must submit to the Department:
 - (1) A list of any misdemeanor or felony convictions;
 - (2) A copy of the court record, which includes charges and disposition;

- (3) Explanation from the applicant of the events leading to the conviction (what, when, where, why) and a summary of actions the applicant has taken to address the behaviors/actions related to the convictions;
- (4) All addiction/mental health evaluations and proof of treatment, if the conviction involved a drug and/or alcohol related offense and if treatment was obtained and/or required, and;
- (5) A letter from the probation officer addressing probationary conditions and current status, if the applicant is currently on probation.

3. The renewal fee(s) according to 180 NAC 11-016.

11-011.03 Renewal Procedures for Business Licenses: The request for renewal may be submitted in person or by mail, and must include all required documentation and the renewal fee, which must be paid no later than the expiration date. Renewal requests must be submitted to the Nebraska Radon Program, Department of Health and Human Services, P.O. Box 95026, Lincoln, NE 68509-5026. Checks or money orders must be made payable to the Department of Health and Human Services. The applicant may obtain an application from the Department or construct an application that must contain the following information:~~Each laboratory approval issued is nontransferable. Each approval will initiate on April 1 and will expire on March 31 of each year. The operator of a radon laboratory may apply for renewal of approval by submitting an application for renewal that complies with the requirements of 180 NAC 11-011.01 and includes the appropriate fees. To have its approval renewed, the laboratory must document that it has maintained the certification status required by 180 NAC 11-011.02.~~

1. Written application:
 - a. Applicant name;
 - b. Business name;
 - c. Business mailing address (including city, state, and zip code); and
 - d. Business phone and fax numbers.
2. Documentation: Documentation of any changes in the following areas:
 - a. Techniques and services offered and type of equipment or materials used;
 - b. Specialist staff employed by the business;
 - c. Quality assurance or quality control plans;
 - d. Reporting forms to clients;
 - e. Worker Health and Safety programs; and
 - f. Disciplinary Action: A list of any disciplinary actions taken against the applicant's license (in any profession in Nebraska or another state) and a copy of the disciplinary action(s), including charges and disposition

3. The renewal fee(s) according to 180 NAC 11-016.

11-011.04 Waivers for Military Service: A license holder who has served in the regular armed forces of the United States during part of the licensing period immediately preceding the renewal date, or is actively engaged in military service as defined in 180

NAC 11-002, is not required to pay the renewal fee or to meet the continuing competency requirements if acceptable documentation is submitted to the Department. The individual must document his/her military service by submitting to the Department:~~The Department may refuse to issue an approval and may revoke or suspend an approval issued under this rule if the operator of the laboratory fails to meet any of the criteria listed in 180 NAC 41-011.~~

1. Military identification proving that s/he is in active service;
2. Military orders; or
3. A letter from his/her Commanding Officer indicating that s/he is on active duty.

Upon receipt of acceptable documentation, the Department will waive the fee and the continuing competency requirements and renew the license. The license will remain active until the next renewal period.

11-011.05 Waiver of Continuing Competency Requirements: The Department waives continuing competency requirements for individuals who were first licensed within the 24-month period immediately preceding the renewal date.

11-011.06 Department Review: The Department will act within 150 days upon all completed applications for renewal.

11-011.06A False Information: The Department may refuse to renew a license for falsification of any information submitted for renewal of a license. The refusal will be made according to 184 NAC 1, the Department's Rules of Practice and Procedure for Administrative Hearings.

11-011.07 Address Information: Each license holder must notify the Department of any change to the address of record.

11-011.08 Expiration of a license: A license expires if a license holder fails to:

1. Notify the Department that s/he wants to place his/her license on inactive status upon its expiration;
2. Meet the requirements for renewal on or before the date of expiration of his/her license; or
3. Otherwise fails to renew his/her license.

11-011.08A Failure to Renew: A license automatically expires without further notice or opportunity for hearing if a license holder fails by the expiration date of the license to either:

1. Submit documentation of continuing competency; or
2. Pay the required renewal fee.

11-011.08B Failure to Meet Continuing Competency Requirements: The Department will refuse to renew a license, after notice and opportunity for hearing, if a license holder fails to meet the continuing competency requirements for renewal by the expiration date of the license.

11-011.08C Right to Practice: When an individual's license expires, the right to represent him/herself as a license holder and to practice radon measurement or mitigation expires.

11-011.08D Practice After Expiration: An individual who practices after expiration of his/her license is subject to assessment of an administrative penalty under 180 NAC 11-015 or such other action as provided in the statutes and regulations governing the license.

11-011.08E Reinstatement of an Expired License: If a license holder wants to resume the practice of radon measurement or mitigation after failing to renew his/her license by the expiration date, s/he must apply to the Department for reinstatement as specified in 180 NAC 11-014.

11-011.09 Inactive Status: When an individual wants to have his/her license placed on inactive status, s/he must notify the Department in writing. There is no fee to have a license placed on inactive status and continuing competency is not required.

11-011.09A Request for Inactive Status: When the Department has received notification that an individual wants to have his/her license placed on inactive status, the Department will notify the license holder in writing of the acceptance or denial of the request.

11-011.09B Placement on Inactive Status: When an individual's license is placed on inactive status, the license holder must not engage in the practice of radon measurement or mitigation, but may represent him/herself as having an inactive license.

11-011.09C Return to Active Status: A license may remain on inactive status for an indefinite period of time. An individual who wants to have his/her license returned to active status must apply to the Department for reinstatement and meet the requirements specified in 180 NAC 11-014.

11-012 DISCIPLINARY ACTIONS MITIGATION SYSTEM INSTALLATION REQUIREMENTS

11-012.01 Grounds for Action Against a License: A license to practice radon measurement or mitigation may have disciplinary actions taken against it on any of the following grounds: These requirements for installation of radon mitigation systems provide a basis for evaluating the quality of such installations. It provides the basis against which in-progress or completed inspections will be evaluated. Additional recommendations for radon mitigation systems are specified in the Radon Mitigation Standards, Publication No. EPA 402-R-93-078, October 1993 (Revised April 1994).

1. Misrepresentation of material facts in procuring or attempting to procure a license;
2. Immoral or dishonorable conduct evidencing unfitness to practice the profession in this state;

3. Abuse of, dependence on, or active addiction to alcohol, any controlled substance, or any mind-altering substance;
4. Failure to comply with a treatment program or an aftercare program, including, but not limited to, a program entered into under the Licensee Assistance Program established pursuant to Neb. Rev. Stat. § 38-175;
5. Conviction of:
 - a. A misdemeanor or felony under Nebraska law or federal law, or
 - b. A crime in any jurisdiction which, if committed within this state, would have constituted a misdemeanor or felony under Nebraska law and which has a rational connection with the fitness or capacity of the applicant or credential holder to practice the profession;
6. Practice of the profession:
 - a. Fraudulently,
 - b. Beyond its authorized scope,
 - c. With gross incompetence or gross negligence, or
 - d. In a pattern of incompetent or negligent conduct;
7. Practice of the profession while the ability to practice is impaired by alcohol, controlled substances, drugs, mind-altering substances, physical disability, mental disability, or emotional disability;
8. Physical or mental incapacity to practice the profession as evidenced by a legal judgment or a determination by other lawful means;
9. Illness, deterioration, or disability that impairs the ability to practice the profession;
10. Permitting, aiding, or abetting the practice of a profession or the performance of activities requiring a license by a person not licensed to do so;
11. Having had his/her license denied, refused renewal, limited, suspended, revoked, or disciplined in any manner similar to 172 NAC 11-012.05 by another state or jurisdiction based upon acts by the applicant or license holder similar to acts described in this part;
12. Use of untruthful, deceptive, or misleading statements in advertisements;
13. Conviction of fraudulent or misleading advertising or conviction of a violation of the Uniform Deceptive Trade Practices Act;
14. Distribution of intoxicating liquors, controlled substances, or drugs for any other than lawful purposes;
15. Violations of the Uniform Credentialing Act or the rules and regulations relating to the particular profession;
16. Unlawful invasion of the field of practice of any profession regulated by the Uniform Credentialing Act which the license holder is not licensed to practice;
17. Violation of the Uniform Controlled Substances Act or any rules and regulations adopted pursuant to the act;
18. Failure to file a report required by Neb. Rev. Stat. §§ 38-1,124 or 38-1,125;
19. Failure to maintain the requirements necessary to obtain a license;
20. Violation of an order issued by the Department;
21. Violation of an assurance of compliance entered into under Neb. Rev. Stat. § 38-1,108;
22. Failure to pay an administrative penalty; or
23. Unprofessional conduct as defined in 180 NAC 11-012.02.

11-012.02 Unprofessional Conduct: Unprofessional conduct means any departure from or failure to conform to the standards of acceptable and prevailing practice of a profession or the ethics of the profession, regardless of whether a person, consumer, or entity is injured. Unprofessional conduct also means conduct that is likely to deceive or defraud the public or is detrimental to the public interest, including but not limited to: Radon mitigation specialists will be responsible for all radon mitigation systems installed by their firm or its subcontractors to ensure compliance with the requirements of 180 NAC 11-012.

1. Division of fees, or agreeing to split or divide the fees, received for professional services with any person for bringing or referring a consumer other than:
 - a. With a partner or employee of the applicant or license holder or his/her office or clinic;
 - b. With a landlord of the applicant or license holder pursuant to a written agreement that provides for payment of rent based on gross receipts, or;
 - c. With a former partner or employee of the applicant or license holder based on a retirement plan or separation agreement.
2. Obtaining any fee for professional services by fraud, deceit, or misrepresentation, including, but not limited to, falsification of third-party claim documents;
3. Cheating on or attempting to subvert the licensing examination;
4. Use of any letters, words, or terms, either as a prefix, affix, or suffix, on stationery, in advertisements, or otherwise, indicating that the person is entitled to practice a profession for which s/he is not licensed;
5. Knowingly disclosing confidential information except as otherwise permitted by law;
6. Commission of any act of sexual abuse, misconduct, or exploitation related to the practice of the profession of the applicant or license holder;
7. Failure to keep and maintain adequate records of treatment or service;
8. Prescribing, administering, distributing, dispensing, giving, or selling any controlled substance or other drug recognized as addictive or dangerous for other than a medically accepted therapeutic purpose;
9. Failure to comply with any federal, state, or municipal law, ordinance, rule, or regulation that pertains to the applicable profession; and
10. Disruptive behavior, whether verbal or physical, which interferes with consumer care or could reasonably be expected to interfere with the care.

11-012.03 Temporary Suspension or Limitation~~Limitations~~

11-012.03A The Department may temporarily suspend or temporarily limit any license issued by the Department without notice or a hearing if the Director determines that there is reasonable cause to believe that grounds exist under 180 NAC 11-012.01 for the revocation, suspension, or limitation of the license and that the license holder's continuation in practice or operation would constitute an imminent danger to the public health and safety. Simultaneously with the action, the Department will institute proceedings for a hearing on the grounds for revocation, suspension, or limitation of the license. The hearing will be held no later

than 15 days from the date of the temporary suspension or temporary limitation of the license.

11-012.03B A continuance of the hearing will be granted by the Department upon the written request of the license holder, and the continuance must not exceed 30 days unless waived by the license holder. A temporary suspension or temporary limitation order by the Director will take effect when served upon the license holder.

11-012.03C A temporary suspension or temporary limitation of a license under 180 NAC 11-012.03 will not be in effect for more than 90 days unless waived by the license holder. If a decision is not reached within 90 days, the license will be reinstated unless and until the Department reaches a decision to revoke, suspend, or limit the license or otherwise discipline the license holder.

- ~~1. Where discrepancies exist between provisions of 180 NAC 11 and local codes or regulations, local codes will take precedence, except that the local codes will not take precedence with regard to alterations that may adversely impact the radon reduction functions for which such systems were originally designed and may adversely impact public health and safety regarding exposure to a radioactive element.~~
- ~~2. Compliance with these requirements does not guarantee reduction of indoor radon concentrations to any specific level.~~
- ~~3. The requirements specified in 180 NAC 11-012 will not apply to radon mitigation systems installed prior to April 6, 2003. However, if a radon mitigation system is found that does not comply with current standards, the licensee must recommend in writing to the client that the system be upgraded or altered to meet current standards. The licensee must obtain prior approval from the client before implementing any of the licensee's written recommendations.~~
- ~~4. Because of the wide variation in building design, size, operation and use, these requirements do not include detailed guidance on how to select the most appropriate mitigation strategy for a given building.~~

11-012.04 Department Action: The Department will follow the procedures delineated in the Uniform Credentialing Act to notify license holders of any disciplinary action to be imposed and the time and place of the hearing.~~General Practices: The following general practices are required for all contacts between radon mitigation licensees and clients:~~

- ~~1. In the initial contact with a client, the specialist must review any available results from previous radon measurements to assist in developing an appropriate mitigation strategy. The specialist must inform the client when it is determined that previous radon measurements were not performed according to EPA protocols and must recommend retesting.~~
- ~~2. Based on guidance contained in US EPA's "A Citizen's Guide to Radon (Second~~

~~Edition)," or subsequent revisions of that document, the licensee must refer the client to the discussions of interpreting indoor radon test results and the health risk associated with the radon level found in the building. The US EPA's "Consumer's Guide to Radon Reduction," is an appropriate reference for providing advice on actions to take to reduce indoor radon levels.~~

- ~~3. In dwellings with levels exceeding 100 pCi/l, the mitigation specialist must advise the client of temporary measures that can be used to reduce occupant exposure until a permanent mitigation system is installed. This may include temporary measures such as natural ventilation, mechanical ventilation with unconditioned outside air, limiting the occupants' exposure by minimizing the time spent in areas of the home with elevated radon levels, or any measures which effectively minimize occupant exposure.~~
- ~~a. The mitigation specialist must not install a temporary system in lieu of a permanent mitigation system.~~
- ~~b. Temporary radon reduction systems must be labeled as such. The label must be readable from at least three feet and must include a statement that the system is temporary and that it will be replaced with a permanent system within 30 days after the installation date of the temporary system. The label must also include the licensee's name, license number, phone number, and the installation date.~~
- ~~c. If the equipment is not easily labeled, the notice must be posted on the electric service panel, or other prominent location.~~

11-012.05 Sanctions: Upon the completion of any hearing held regarding discipline of a license, the Director may dismiss the action or impose the following sanctions:~~The mitigation business must provide the following written information to the client prior to initiating any work:~~

1. Censure;
 2. Probation;
 3. Limitation;
 4. Civil Penalty;
 5. Suspension; or
 6. Revocation.
- ~~1. The mitigation business license number,~~
 - ~~2. The scope of the work to be completed including an estimate of the time needed to complete the work,~~
 - ~~3. A statement indicating any known hazards associated with chemicals used in or as part of the installation and the potential need to ventilate work areas during and after the use of such materials,~~
 - ~~4. An estimate of the installation cost and annual operating cost of the system, and~~
 - ~~5. A statement indicating compliance with provisions of the Act, Title 180, and all other related municipal, county, state and federal laws and regulations.~~

11-012.05A Additional Terms and Conditions of Discipline: If any discipline is imposed pursuant to 180 NAC 11-012.05, the Director may, in addition to any other terms and conditions of that discipline:

1. Require the license holder to obtain additional professional training and to pass an examination upon the completion of the training. The examination may be written or oral or both and may be a practical or clinical examination or both or any or all of the combinations of written, oral, practical, and clinical, at the option of the Director;
2. Require the license holder to submit to a complete diagnostic examination by one or more physicians or other qualified professionals appointed by the Director. If the Director requires the license holder to submit to an examination, the Director will receive and consider any other report of a complete diagnostic examination given by one or more physicians or other qualified professionals of the license holder's choice if the license holder chooses to make available the report or reports by his/her physician or physicians or other qualified professionals; and
3. Limit the extent, scope, or type of practice of the license holder.

11-012.06 Building Investigation

- ~~1. The licensee must conduct a thorough visual inspection of the building prior to initiating any radon mitigation work. The inspection is intended to identify any specific building characteristics and configurations (e.g., large cracks in slabs, exposed earth in crawlspaces, open stairways to basements) and operational conditions (e.g., continuously running HVAC systems or operational windows) that may affect the design, installation, and effectiveness of radon mitigation systems.~~
- ~~2. As part of the building investigation, a floor plan sketch will be developed (if not already in existence and readily available) that includes illustrations of the building foundation (slab-on-grade, basement, or crawlspace area.) The sketch should include the location of load-bearing walls, drain fixtures, and HVAC systems. It should be annotated to include suspected or confirmed radon entry points, results of any diagnostic testing, the anticipated layout of any radon mitigation system piping, and the anticipated locations of any vent fan and system warning devices for the envisioned mitigation systems. The sketch must be finalized during installation and must be included in the documentation specified in 180 NAC 11-012.13.~~

11-012.07 Worker Health and Safety: The following requirements that are specifically or uniquely applicable for the safety and protection of radon mitigation workers must be met:

- ~~1. The licensee must advise workers of the hazards of exposure to radon and the importance of protective measures when working in areas of elevated radon concentrations.~~

- ~~2. The licensee must have a worker protection plan on file that is available to all employees. Exception: A worker protection plan is not required for a licensee who is a sole proprietor unless required by local regulations.~~
- ~~3. Work areas must be ventilated to reduce worker exposure to radon decay products, dust, or other airborne pollutants. In work areas where ventilation is impractical or where ventilation cannot reduce radon levels to less than .3 WL or 30 pCi/l (based on a short-term diagnostic test), the licensee must ensure that appropriate respiratory protection is used.~~
- ~~4. Pending the development of an approved personal radon exposure device and a protocol for its use, licensees must record employee exposure to radon at each work site, based on the highest pre-mitigation indoor radon or working level measurement available and the time employees are exposed (without respirator protection) at that level unless on-site radon or radon decay product measurements are used to determine exact exposure.~~
- ~~5. Licensees must ensure that employees are exposed to no more than 4 working level months (WLM) over a 12 month period. (An equilibrium ratio of 50% must be used to convert radon exposure to WLM.)~~
- ~~6. In any planned work area where it is suspected that friable asbestos may exist and be disturbed, radon mitigation work must not be conducted until a determination is made by a properly trained or accredited person that such work will be undertaken in a manner which complies with applicable asbestos regulations.~~
- ~~7. Licensees must advise employees of the potential hazards, of the materials and supplies used, and to provide applicable Material Safety Data Sheets (MSDS) and explain the required safety procedures.~~

~~11-012.08 Systems Design~~

- ~~1. All radon mitigation systems must be designed and installed as permanent, integral additions to the building, except where a temporary system has been installed in accordance with 180 NAC 11-012.04 or if an exemption is applied for and approved by the Department.~~
- ~~2. All radon mitigation systems must be designed to avoid the creation of other health, safety, or environmental hazards to building occupants, such as backdrafting of natural draft combustion appliances.~~
- ~~3. All radon mitigation systems must be designed to maximize radon reduction while minimizing excess energy usage, avoiding compromise of moisture and temperature controls and other comfort features, and minimizing noise.~~

~~11-012.09 Systems Installation~~

~~1. Radon Vent Pipe Installation Requirements~~

- ~~a. All vent stack piping must be solid, rigid pipe not less than 3 in. (75 cm) inside diameter (ID).~~
- ~~b. All joints and connections in radon mitigation systems using plastic vent pipes must be permanently sealed with adhesives as specified by the manufacturer of the pipe material used. Exceptions include when installing vent pipes in sumps specified in 180 NAC 11-012.09, item 1(g) and when installing fans specified in 180 NAC 11-012.09, item 2(g). Joints or connections in other vent pipe materials must be made air tight.~~
- ~~c. Radon vent pipes must be fastened to the structure of the building with hangers, strapping, or other supports that will adequately secure the vent material. Existing plumbing pipes, ducts, or mechanical equipment must not be used to support or secure a radon vent pipe.~~
- ~~d. Supports for radon vent pipes must be installed at least every six feet on horizontal runs. Vertical runs must be secured either above or below the points of penetration through floors, ceilings, and roofs, or at least every eight feet on runs that do not penetrate floors, ceilings, or roofs.~~
- ~~e. To prevent blockage of air flow into the bottom of radon vent pipes, these pipes must be supported or secured in a permanent manner that prevents their downward movement to the bottom of suction pits or sump pits, into the soil beneath an aggregate layer under a slab, or into the soil beneath a soil-gas retarder membrane.~~
- ~~f. Radon vent pipes must be installed in a configuration that ensures that any rain water or condensation within the pipes drains downward into the ground beneath the slab or soil-gas retarder membrane.~~
- ~~g. Radon vent pipes must not block access to any areas requiring maintenance or inspection. Radon vents must not be installed in front of or interfere with any light, opening, door, window or equipment access area required by code. If radon vent pipes are installed in sump pits, the system must be designed with removable or flexible couplings to facilitate removal of the sump pit cover for sump pump maintenance.~~
- ~~h. To prevent re-entrainment of radon, the point of discharge from vents of fan-powered soil depressurization and block wall depressurization systems must meet all of the following requirements: (1) be above the eave of the roof, (2) be ten feet or more above ground level, (3) be ten feet or more from any window, door, or other opening into conditioned spaces of the structure that is less than two feet below the exhaust point, and (4) be ten feet or more from any opening into an adjacent building. The total required distance (ten feet) from the point of~~

~~discharge to openings in the structure may be measured either directly between the two points or be the sum of measurements made around intervening obstacles. Whenever possible, the exhaust point should be positioned above the highest eave of the building and as close to the roof ridge line as possible.~~

~~1.Radon Vent Fan Installation Requirements~~

- ~~a.Vent fans used in radon mitigation systems must be designed specifically for radon removal applications and must be designed or otherwise sealed to reduce the potential for leakage of soil gas from the fan housing.~~
- ~~b.Radon vent fans must be sized to provide the pressure difference and air flow characteristics necessary to achieve the radon reduction goals established for the specific mitigation project.~~
- ~~c.Radon vent fans used in active soil depressurization or block wall depressurization systems must not be installed below grade nor in the conditioned (heated/cooled) space of a building, nor in any basement, crawlspace, or other interior location directly beneath the conditioned spaces of a building. Acceptable locations for radon vent fans include attics not suitable for occupancy (including attics over living spaces and garages), garages that are not beneath conditioned spaces, or on the exterior of the building.~~
- ~~d.Radon vent fans must be installed in a configuration that avoids condensation buildup in the fan housing. Fans must be installed in vertical runs of the vent pipe.~~
- ~~e.Radon vent fans mounted on the exterior of buildings must be rated for outdoor use or installed in a water tight protective housing.~~
- ~~f.Radon vent fans must be mounted and secured in a manner that minimizes transfer of vibration to the structural framing of the building.~~
- ~~g.To facilitate maintenance and future replacement, radon vent fans must be installed in the vent pipe using removable couplings or flexible connections that can be tightly secured to both the fan and the vent pipe.~~
- ~~h.The intakes of fans used in crawlspace pressurization, or in pressurizing the building itself, must be screened or filtered to prevent ingestion of debris or personal injury. Screens or filters must be removable to permit cleaning or replacement and building owners must be informed of the need to periodically replace or clean such screens and filters. This information must also be included in the documentation specified in 180 NAC 11-012.13.~~

~~3. Suction Pit Requirement for Sub-Slab Depressurization (SSD) Systems~~

- ~~a. To provide optimum pressure field extension of the subslab communication zone, adequate material must be excavated from the area immediately below the slab penetration point of SSD system vent pipes.~~

~~4. Sealing Requirements~~

- ~~a. Sump pits that permit entry of soil gas or that would allow conditioned air to be drawn into a sub-slab depressurization system must be covered and sealed with materials specified in 180 NAC 11-012.10, item 7. The covers on sumps that previously provided protection or relief from surface water collection must be fitted with a water or mechanically trapped drain.~~

- ~~b. Openings around radon vent pipe penetrations of the slab, the foundation walls, or the crawlspace soil-gas retarder membrane must be cleaned, prepared, and sealed in a permanent, air-tight manner using compatible caulks or other sealant materials as specified in 180 NAC 11-012.10, item 5. Openings around other utility penetrations of the slab, walls, or soil-gas retarder must also be sealed.~~

- ~~c. Where a Block Wall Depressurization (BWD) system is used to mitigate radon, openings in the tops of such walls and all accessible openings or cracks in the interior surfaces of the walls must be closed and sealed with polyurethane or equivalent caulks, expandable foams, or other fillers and sealants as specified in 180 NAC 11-012.10, items 5 and 6. Openings or cracks that are determined to be inaccessible or beyond the ability of the licensee to seal must be disclosed to the client and included in the documentation specified in 180 NAC 11-012.13.~~

- ~~d. Openings, perimeter channel drains, or cracks that exist where the slab meets the foundation wall (floor-wall joint), must be sealed with urethane caulk or equivalent material. When the opening or channel is greater than 1/2 inch in width, a foam backer rod or other comparable filler material must be inserted in the channel before application of the sealant. This sealing technique must be done in a manner that retains the channel feature as a water control system. Openings or cracks that are determined to be inaccessible or beyond the ability of the licensee to seal must be disclosed to the client and included in the documentation.~~

- ~~e. When installing baseboard-type suction systems, all seams and joints in the baseboard material must be joined and sealed using materials recommended by the manufacturer of the baseboard system. Baseboards must be secured to walls and floors with adhesives designed and recommended for such installations. If a baseboard~~

~~system is installed on a block wall foundation, the tops of the blockwall must be closed and sealed as prescribed in 180 NAC 11-012.09, item 5(c).~~

~~f. Any seams in soil gas retarder membranes used in crawlspaces for sub-membrane depressurization systems must be overlapped at least 12 inches and must be sealed. To enhance the effectiveness of sub-membrane depressurization systems, the membrane must also be sealed around interior piers and to the inside of exterior walls to the extent possible.~~

~~g. In combination basement/crawlspace foundations, where the crawlspace has been confirmed as a source of radon entry, access doors and other openings between the basement and the adjacent crawlspace must be closed and sealed. Access doors required by code must be fitted with air tight gaskets and a means of positive closure, but must not be permanently sealed. In cases where both the basement and the adjacent crawlspace areas are being mitigated with active SSD and SMD systems, sealing of the openings between those areas is not required.~~

~~h. When crawlspace depressurization is used for radon mitigation, openings and cracks in floors above the crawl space which would permit conditioned air to pass out of the living spaces of the building, must be identified, closed, and sealed. Sealing of openings around hydronic heat or steam pipe penetrations must be done using non-combustible materials. Openings or cracks that are determined to be inaccessible or beyond the ability of the licensee to seal must be disclosed to the client and included in the documentation.~~

~~5. Electrical Requirements~~

- ~~a. Wiring may not be located in or chased through the mitigation installation ducting or any other heating or cooling ductwork.~~
- ~~b. Any plugged cord used to supply power to a radon vent fan must be no longer than six feet in length.~~
- ~~c. No plugged cord may penetrate a wall or be concealed within a wall.~~
- ~~d. Radon mitigation fans installed on the exterior of buildings must be hard-wired into an electrical circuit. Plugged fans must not be used outdoors.~~
- ~~e. If the rated electricity requirements of a radon mitigation system fan exceeds 50% of the circuit capacity into which it will be connected, or if the total connected load on the circuit (including the radon vent fan) exceeds 80% of the circuit's rated capacity, a separate, dedicated circuit must be installed to power the fan.~~
- ~~f. An electrical disconnect switch or circuit breaker must be installed in radon mitigation system fan circuits to permit deactivation of the fan for maintenance or repair (Disconnect switches are not required with plugged fans).~~

~~6.Drain Installation Requirements~~

- ~~a.If condensate drains from air conditioning units terminate beneath the floor slab, the licensee must install a trap in the drain that provides a minimum six-inch standing water seal depth, reroute the drain directly into a trapped floor drain, or reconnect the drain to a condensate pump.~~
- ~~b.When a sump pit is the only system in a basement for protection or relief from excess surface water and a cover is installed on the sump for radon control, the cover must be recessed and fitted with a trapped drain meeting the requirements specified in 180 NAC 11-012.09, item 5(a).~~

~~7.HVAC Installation Requirements~~

- ~~a.Modifications to an existing HVAC system, which are proposed to mitigate elevated levels of radon, should be reviewed and approved by the original designer of the system (when possible) or by a licensed mechanical contractor.~~
- ~~b.Foundation vents, installed specifically to reduce indoor radon levels by increasing the natural ventilation of a crawlspace, must be non-closeable. In areas subject to freezing conditions, water supply and other kinds of pipes or equipment, which could be damaged by freezing must be insulated or otherwise protected from freezing.~~
- ~~c.Heat Recovery Ventilation (HRV) systems must not be installed in areas of the building that contain friable asbestos.~~
- ~~d.In HRV installations, supply and exhaust ports in the interior must be located a minimum of 12 feet apart. The exterior supply and exhaust ports must be positioned a minimum of 12 inches (30 cm) above the ground to avoid blockage by snow or leaves and be a minimum of 10 feet apart. Exterior supply /intake ports must be located away from areas where stored material or equipment could block airflow. Exterior supply/intake ports must be kept away from where car and truck exhaust or other air pollutants may be present.~~
- ~~e.Licensees installing HRV systems must verify that the incoming and outgoing airflow is balanced to ensure that the system does not create a negative pressure within the building. Licensees must inform building owners that periodic filter replacement and inlet grill cleaning are necessary to maintain a balanced airflow. This information must also be included in the documentation specified in 180 NAC 11-012.13.~~
- ~~f.Both internal and external intake and exhaust vents in HRV systems must be~~

~~covered with wire mesh or screening to prevent entry of animals or debris or injury to occupants.~~

11-012.10 Materials

- ~~1.All mitigation system electrical components must be U.L. listed or of equivalent specifications.~~
- ~~2.As a minimum, all plastic vent pipes in mitigation systems must be made of Schedule 20 PVC, ABS or equivalent piping material.~~
- ~~3.Vent pipe fittings in a mitigation system must be of the same material as the vent pipes unless flexible, airtight rubber couplings are used when installing vent fans or when installing radon vent pipes in sump pit covers.~~
- ~~4.Cleaning solvents and adhesives used to join plastic pipes and fittings must be as recommended by manufacturers for use with the type of pipe material used in the mitigation system.~~
- ~~5.When sealing cracks in slabs and other small openings around penetrations of the slab and foundation walls, caulks and sealants designed for such application must be used.~~
- ~~6.When sealing holes for plumbing rough-in or other large openings in slabs and foundation walls that are below the ground surface, non-shrink mortar, grouts, expanding foam, or similar materials designed for such application must be used.~~
- ~~7.Sump pit covers must be made of durable plastic or other rigid material and designed to permit air-tight sealing. To permit easy removal for sump pump servicing, the cover must be sealed using silicone or other non-permanent type caulking materials or an air-tight gasket.~~
- ~~8.Penetrations of sump covers to accommodate electrical wiring, water ejection pipes, or radon vent pipes must be designed to permit air-tight sealing around penetrations, using caulk or grommets.~~
- ~~9.Plastic sheeting installed in crawlspaces as soil gas retarders must be a minimum of 6 mil (3 mil cross-laminated) polyethylene or equivalent flexible material.~~
- ~~10.Any wood in contact with soil or concrete and is used in attaching soil gas retarder membranes to crawlspace walls or piers must be pressure treated or naturally resistant to decay and termites.~~

11-012.11 Monitors and Labeling

- ~~1.All active soil depressurization and block wall depressurization radon mitigation systems must include a mechanism to monitor system performance and warn~~

~~of system failure. The mechanism must be simple to read or interpret and be located where it is easily seen or heard by building occupants and protected from damage or destruction.~~

- ~~2. Electrical radon mitigation system monitors (whether visual or audible) must be installed on non-switched circuits and be designed to reset automatically when power is restored after service or power supply failure. Battery operated monitoring devices may not be used unless they are equipped with a low power warning feature.~~
- ~~3. Mechanical radon mitigation system monitors, such as manometer type pressure gauges, must be clearly marked to indicate the range or zone of pressure readings that existed when the system was initially activated.~~
- ~~4. One central system description label must be placed on the mitigation system, the electric service entrance panel, or other prominent location. This label must be legible from a distance of at least three feet and include the following information: "Radon Reduction System," the installer's name, phone number, and license number, the date of installation, and an advisory that the building should be tested for radon at least every two years or as required or recommended by state or local agencies. In addition, all visible radon mitigation system vent pipe sections must be identified with at least one label on each floor level. The label will read, "Radon Reduction System."~~
- ~~5. The circuit breakers controlling the circuits on which the radon vent fan and system failure warning devices operate must be labeled "Radon Reduction System."~~

~~11-012.12 Post-Mitigation Testing~~

- ~~1. After installation of an active radon control system (e.g., SSD), the licensee must re-examine and verify the integrity of the fan mounting seals and all joints in the interior vent piping.~~
- ~~2. After installation of any active radon mitigation system, the licensee must measure suction or flows in system piping or ducting to assure that the system is operating as designed.~~
- ~~3. Immediately after installation and activation of any active (fan-powered) sub-slab depressurization or block wall depressurization system in buildings containing natural draft combustion appliances, the building must be tested for backdrafting of those appliances. Any backdrafting condition that results from installation of the radon mitigation system must be corrected before the system is placed in operation.~~

~~The following checklist has been extracted from various references and may be used to test for existing or potential backdrafting conditions:~~

- ~~a. Close all windows and doors, both external and internal.~~
 - ~~b. Open all HVAC supply and return air duct vents/registers.~~
 - ~~c. Close fireplace and wood stove dampers.~~
 - ~~d. Turn on all exhaust and air distribution fans and combustion appliances EXCEPT the appliance being tested for backdrafting.~~
 - ~~e. Wait five minutes.~~
 - ~~f. To begin a test for actual spillage of flue gases, turn on the appliance being tested. (If the appliance is a forced air furnace, ensure that the blower starts to run before proceeding.)~~
 - ~~g. Using either a smoke tube or a carbon dioxide gas analyzer, check for flue gas spillage near the vent hood after the appliance has been running five minutes.~~
 - ~~h. Repeat steps (d) through (g) for each natural draft combustion appliance being tested for backdrafting. Seasonal and extreme weather conditions should be considered when evaluating pressure differentials and the potential for backdrafting.~~
 - ~~i. If spillage is confirmed from any natural draft combustion appliance, clients must be advised of the backdrafting condition and that active (fan-powered) radon mitigation systems cannot be installed until the condition has been corrected. Licensees should advise the client to contact an HVAC contractor if correcting an existing or potential backdrafting condition is necessary.~~
- ~~4. Upon completion of radon mitigation work, the licensee must take steps to ensure that the effectiveness of the radon reduction system is demonstrated using one of two approaches: 1) the licensee leaves an approved radon test kit with the homeowner and instructs that person, in writing, that a radon test should be performed using the supplied radon test kit or any other approved test kit or 2) the required radon test is performed by a licensed radon measurement specialist. If the mitigation specialist is licensed as a measurement specialist and conducts the test, and the homeowner accepts the test results as satisfactory evidence of system effectiveness, further post-mitigation testing is not required. However, to avoid the appearance of conflict of interest, the licensee must recommend to the homeowner that a post-mitigation measurement be conducted by an independent licensed radon measurement specialist or by the homeowner.~~
- ~~5. Post-mitigation tests must be of sufficient type, duration, and consistency to allow for comparison of pre- and post-mitigation levels. The post-mitigation test must be started no sooner than 24 hours, nor longer than 30 days after mitigation. All measurements must be conducted in accordance with the requirements of 180 NAC 11-013.01.~~
- ~~6. To ensure continued effectiveness of the radon mitigation system(s) installed, the licensee must advise the client to retest the building at least every two years or if the building undergoes significant alteration.~~

~~11-012.13 Upon completion of the mitigation project, the licensee must provide the~~

homeowner with an information package that includes:

1. Any building permits required by local codes.
2. Copies of the Building Investigation Summary and floor plan sketch.
3. Pre and post mitigation radon test data.
4. Copies of contracts and warranties.
5. A description of the mitigation system installed and its basic operating principles.
6. A description of any deviations from 180 NAC 11 that has been approved by the Department.
7. A description of the proper operating procedures of any mechanical or electrical systems installed, including manufacturer's operation and maintenance instructions and warranties.
8. A list of appropriate actions for clients to take if the system failure warning device indicates system degradation or failure.
- 9.6. The name, telephone number, and license numbers of the person installing the system, and the phone number of the state radon office.

11-013 VOLUNTARY SURRENDER OR LIMITATION: A license holder may offer to voluntarily surrender or limit a license issued by the Department. The license holder must make the offer in writing on a form provided by the Department or constructed by the license holder, which must include the following information:

PROFICIENCY REQUIREMENTS

1. Personal Information:
 - a. First, middle and last name;
 - b. Mailing address (street, rural route, or post office address), city, state, and zip code;
 - c. Telephone number; and
 - d. Fax number.
2. Information Regarding the License Being Offered for Surrender or Limitation:
 - a. List license(s) and license number(s) that would be surrendered or limited;
 - b. Indicate the desired time frame for offered surrender or limitation:
 - (1) Permanently;
 - (2) Indefinitely; or
 - (3) Definite period of time (specify);
 - c. Specify reason for offered surrender or limit of license; and
 - d. Specify any terms and conditions that the license holder wishes to have the Department consider and apply to the offer.
3. Attestation: The credential holder must:
 - a. Attest that all the information on the offer is true and complete; and
 - b. Provide the license holder's signature and date.

11-013.01 The Department may accept an offer of voluntary surrender or limitation of a license based on:

1. An offer made by the license holder on his/her own volition;
2. An offer made with the agreement of the Attorney General or the legal counsel of the Department to resolve a pending disciplinary matter;

- ~~3. A decision by the Attorney General to negotiate a voluntary surrender or limitation in lieu of filing a petition for disciplinary action; or~~
- ~~4. A decision by the legal counsel of the Department to negotiate a voluntary surrender or limitation in response to a notice of disciplinary action.~~
- ~~1. Specialists/technicians must demonstrate proficiency by completing the following requirements:~~
 - ~~a. Submit and follow an approved quality assurance and quality control plan for the measurement device, including the use of duplicates, blanks, and spikes as described in the Protocols for Radon and Radon Decay Product Measurements in Homes, Publication No. EPA 402-R-92-003, May 1993 and Indoor Radon and Radon Decay Product Measurement Device Protocols, Publication No. EPA 402-R-92-004, July 1992, incorporated herein by this reference and available for viewing at the Department of Health and Human Services Regulation and Licensure, 301 Centennial Mall South, 3rd Floor, Lincoln, Nebraska 68509-5007.~~
 - ~~b. Have and use standard operating procedures (SOPs).~~
 - ~~c. Provide proof of calibration(s) prior to use of the device.~~
- ~~2. Complete continuing education requirements specified under 180 NAC 11-013.03.~~

~~1180-013.02 The Department may reject an offer of voluntary surrender of a license under circumstances which include, but are not limited to, when the license:Radon Mitigation Proficiency~~

- ~~1. Is under investigation;~~
- ~~2. Has a disciplinary action pending but a disposition has not been rendered; or~~
- ~~3. Has had a disciplinary action taken against it.~~
- ~~1. Specialists/technicians must follow 180 NAC 11-012 Mitigation System Installation Requirements.~~
- ~~2. Complete continuing education requirements specified under 180 NAC 11-013.03.~~

~~1180-013.03 When the Department either accepts or rejects an offer of voluntary surrender or limitation, the Director will issue the decision in a written order. The order will be issued within 30 days after receipt of the offer of voluntary surrender or limitation and will specify:Continuing Education Requirements~~

- ~~1. Whether the Department accepts or rejects the offer of voluntary surrender; and~~
- ~~2. The terms and conditions under which the voluntary surrender is accepted or the basis for the rejection of an offer of voluntary surrender. The terms and conditions governing the acceptance of a voluntary surrender will include, but not be limited to:~~
 - ~~a. Duration of the surrender;~~

- ~~b. Whether the license holder may apply to have the license reinstated;
and~~

- ~~c. Any terms and conditions for reinstatement.~~

~~1. A licensed individual must annually complete at least three hours of radon courses, seminars, or meetings offered or approved by the Department~~

~~2. Instructors of radon-related courses or seminars may apply to the Department for continuing education credit, which will be determined by the Department. To receive continuing education credit for instruction, the person requesting credit must submit to the Department the following information:~~

~~a. Name, address, and telephone number of the instructor;~~

~~b. Biography or credentials of instructor;~~

~~c. Type of course, frequency of course offerings, total hours of supervised instruction, and an agenda outlining the hours of instruction, describing the subject matter to be included; and~~

~~d. A copy of the certificate issued upon completion of the course.~~

~~3. Continuing education credit will only be valid for one year from date of attendance. Credit will not be granted for attendance of a duplicate course during the licensing period.~~

~~4. Exemptions:~~

~~a. If an individual holds a measurement and a mitigation license, a minimum of five hours of continuing education must be completed annually.~~

~~b. If an individual attends an approved radon measurement or mitigation training course after initial licensure, the continuing education credit earned remains valid for three years from date of course attendance.~~

11-013.04 A limitation may be placed on the right of the license holder to practice a profession or operate a business to the extent, for the time, and under the conditions as imposed by the Director.

11-013.05 Violation of any of the terms and conditions of a voluntary surrender or limitation by the license holder will be due cause for the refusal of renewal of the license, for the suspension or revocation of the license, or for refusal to restore the license.

11-013.06 Reinstatement following voluntary surrender is set out in 180 NAC 11-014.

11-014 REINSTATEMENT: This section applies to individuals previously credentialed in Nebraska who seek the authority to return to practice in Nebraska with a valid Nebraska license. Individuals may apply for reinstatement as follows:

- 1. An individual whose license has expired, been placed on inactive status, voluntarily surrendered for an indefinite period of time, or suspended or limited for disciplinary reasons, may apply for reinstatement at any time.

2. An individual whose license has been voluntarily surrendered for a definite period of time may apply for reinstatement after that period of time has elapsed.
3. An individual whose license has been revoked may apply for reinstatement only after a period of two years has elapsed from the date of revocation.
4. An individual whose license has been permanently voluntarily surrendered may not apply for reinstatement.

The voluntary surrender of a license may be unrelated to disciplinary matters, or may be done to resolve a pending disciplinary matter, in lieu of disciplinary action, or in response to a notice of disciplinary action.

~~11-014.01 Reinstatement From Expired or Inactive Status or Following Voluntary Surrender Unrelated to a Disciplinary Matter Approval of Radon Measurement Training Courses: To be approved as a radon measurement training course, a course must meet and maintain approval by the National Environmental Health Association (NEHA) or National Radon Safety Board (NRSB) as an entry level or initial radon measurement course and must meet for a minimum of 16 hours or apply for approval as an alternative measurement course.~~

The applicant must submit to the Department a written application on a form provided by the Department or constructed by the applicant.

1. Application: The applicant must attest that all information in the application is truthful and complete, and the applicant, in his/her application:
 - a. Must provide the following information:
 - (1) The legal name of the applicant, maiden name (if applicable), and any other names by which the applicant is known;
 - (2) Mailing address (street, rural route, or post office address; and city, state, and zip code or country information;
 - (3) The applicant's:
 - (a) Social Security Number (SSN); or
 - (b) Alien Registration Number (A#); or
 - (c) Form I-94 (Arrival-Departure Record) number.Certain applicants may have both a SSN and an A# or I-94 number, and if so, must report both.
 - (4) If the applicant holds a professional license in another state, a list of the state(s) and type of license;
 - b. Must state that s/he is one of the following:
 - (1) A citizen of the United States;
 - (2) An alien lawfully admitted into the United States for permanent residence under the Immigration and Naturalization Act (INA) and who is eligible for a credential under the Uniform Credentialing Act; or

~~2. To apply for approval as an alternative measurement course, a course provider must meet the following requirements:~~

~~a. Submit an application containing the course provider's name, address, phone number, and biographies of all individuals instructing participants in the training course.~~

~~b. Submit documentation that the course will meet for a minimum of 16 hours with instruction on the following topics:~~

~~(1) course objectives;~~

~~(2) radioactivity, radon, and radon's health effects;~~

~~(3) radon entry and behavior;~~

~~(4) radon measurement devices, techniques, and protocols;~~

~~(5) quality assurance and quality control;~~

~~(6) worker health and safety;~~

~~(7) measuring radon in water; and~~

~~(8) an overview of radon mitigation techniques.~~

~~c. Provide an opportunity for course participants to evaluate the course instructor(s) and materials.~~

~~d. Submit a copy of the certificate issued upon completion of the course.~~

11-014.01A If an applicant has practiced while his/her license was expired, inactive, or voluntarily surrendered, the Department may take one or more of the following actions:

1. Assess an administrative penalty pursuant to 180 NAC 11-015, in which case a separate notice of opportunity for hearing will be sent to the applicant;

2. Deny the application to reinstate the license;

3. Reinstate the license to active status and impose limitation(s) or other disciplinary actions on the license; and/or

4. Reinstate the license.

11-014.01B If an applicant has committed any other violation of the statutes and regulations governing the license, the Department may:

1. Deny the application for reinstatement of the license;

2. Reinstate the license to active status and impose limitation(s) or other disciplinary actions on the license; or

3. Reinstate the license.

11-014.01C The Department will act within 150 days on all completed applications.

11-014.01D The Department's decision may be appealed to the Director by any party to the decision. The appeal must be in accordance with the Administrative Procedure Act.

11-014.02 Reinstatement From Non-Disciplinary Revocation or Lapsed Status: An individual whose license was placed on non-disciplinary revocation or lapsed status before December 1, 2008 may apply for reinstatement as provided in 180 NAC 11-014.01.~~Approval of Radon Mitigation Training Courses: To be approved as a radon mitigation training course, a course must meet and maintain approval by the National Environmental Health Association (NEHA) or National Radon Safety Board (NRSB) as an entry level or initial radon mitigation course and must meet for a minimum of 20 hours or apply for approval as an alternative mitigation course.~~

~~1. The course provider must submit:~~

- ~~a. An application containing the course provider's name, address, phone number, and biographies of all individuals instructing participants in the training course.~~
- ~~b. Documentation showing approval from NEHA or NRSB specified in 180 NAC 11-014.02.~~
- ~~c. A copy of the certificate issued upon completion of the course.~~

~~2. To apply for approval as an alternative mitigation course, a course provider must meet the following requirements:~~

- ~~a. Submit an application containing the course provider's name, address, phone number, and biographies of all individuals instructing participants in the training course.~~
- ~~b. Submit documentation that the course will meet for a minimum of 20 hours with instruction on the following topics:
 - ~~(1) course objectives;~~
 - ~~(2) radon mitigation system design, diagnostics, and installation;~~
 - ~~(3) radon in water mitigation; and~~
 - ~~(4) radon-resistant new construction.~~~~
- ~~c. Provide an opportunity for course participants to evaluate the course instructor(s) and materials.~~
- ~~d. Submit a copy of the certificate issued upon completion of the course.~~

11-014.03 Reinstatement Following Suspension, Limitation, Revocation, or Voluntary Surrender to Resolve a Pending Disciplinary Matter, In Lieu of Discipline, or In Response to a Notice of Disciplinary Action: An individual whose license was suspended or limited may apply for reinstatement at any time. An individual whose license has been revoked may apply for reinstatement after a period of two years has elapsed from the date of revocation. An individual whose license was voluntarily surrendered to resolve a pending disciplinary matter may apply for reinstatement according to the order entered by the Director. Approval of Radon Examinations

The applicant must submit to the Department a written application on a form provided by the Department or constructed by the applicant.

1. Application: The applicant must attest that all information in the application is truthful and complete, and the applicant, in his/her application:
 - a. Must provide the following information:
 - (1) The legal name of the applicant, maiden name (if applicable), and any other names by which the applicant is known;
 - (2) Mailing address (street, rural route, or post office address; and city, state, and zip code or country information);
 - (3) The applicant's:
 - (a) Social Security Number (SSN); or
 - (b) Alien Registration Number (A#); or
 - (c) Form I-94 (Arrival-Departure Record) number.

Certain applicants may have both a SSN and an A# or I-94 number, and if so, must report both.

 - (4) If the applicant holds a professional license in another state, a list of the state(s) and type of license;
 - (5) A statement of the reason the applicant believes his/her license should be reinstated;
 - b. Must state that s/he is one of the following:
 - (1) A citizen of the United States;
 - (2) An alien lawfully admitted into the United States for permanent residence under the Immigration and Naturalization Act (INA) and who is eligible for a credential under the Uniform Credentialing Act; or
 - (3) A non-immigrant whose visa for entry, or application for visa for entry, is related to such employment in the United States;
 - c. If the applicant is an alien or non-immigrant, s/he must submit evidence of lawful permanent residence and/or immigration status which may include a copy of:
 - (1) An Alien Registration Receipt Card (Form I-551, otherwise known as a "Green Card");
 - (2) An unexpired foreign passport with an unexpired Temporary I-551 stamp bearing the same name as the passport;
 - (3) A document showing an Alien Registration Number ("A#") with visa status; or
 - (4) A Form I-94 (Arrival-Departure Record) with visa status;
 - d. May provide the following information about him/herself:
 - (1) Telephone number including area code;
 - (2) E-mail address;
 - (3) Fax number; and
 - e. Must indicate that s/he:
 - (1) Is of good character;

- (2) Has met the continuing competency requirements specified in 180 NAC 11-008 within the 24 months immediately preceding submission of the application (or other requirements as specified by the practice act);
- (3) Has not practiced in Nebraska since s/he last held an active license, or if the applicant has practiced in Nebraska since s/he last held an active license, the actual number of days practiced; and
- (4) Has not committed any act which would be grounds for action against a license as specified in 180 NAC 11-012 since the last renewal or issuance of the license (whichever is later), or if an act(s) was committed, provide an explanation of all such acts; and

2. Fee: The renewal fee.

11-014.03A The Department will consider an application for reinstatement following suspension, limitation, revocation, or voluntary surrender to resolve a disciplinary matter within 150 days of receipt of the application. The Department may:

- 1. Conduct an investigation to determine if the applicant has committed acts or offenses prohibited by Neb. Rev. Stat. § 38-178;
- 2. Require the applicant to submit to a complete diagnostic examination, at the expense of the applicant, by one or more physician(s) or other professionals appointed by the Department. The applicant may also consult a physician(s) or other professionals of his/her own choice for a complete diagnostic examination and make available a report(s) of the examination(s) to the Department;
- 3. Require the applicant to pass a written, oral, or practical examination or any combination of such examinations at the expense of the applicant;
- 4. Require the applicant to complete additional education at the expense of the applicant;
- 5. Require the applicant to successfully pass an inspection of his/her practice site; or
- 6. Take any combination of these actions.

11-014.03B On the basis of the information obtained under 11-014.03A, the Department may:

- 1. Deny the application for reinstatement; .
- 2. Fully reinstate the license;
- 3. Modify the suspension or limitation; or
- 4. Reinstate the license subject to limitations or subject to probation with terms and conditions.

11-014.03C The Department's decision will be mailed to the applicant by certified mail.

1. The decision of the Department will become final 30 days after the decision is mailed to the applicant unless the applicant requests a hearing within that 30-day period.
2. If the applicant has been afforded a hearing or an opportunity for a hearing on an application for reinstatement within two years prior to filing the current application, the Department may grant or deny the application without another hearing.
3. If the applicant requests a hearing, the Department will mail a notice of the date, time, and location of the hearing. The notice will be sent by certified mail at least 30 days before the hearing.
4. Following the hearing, the applicant will be notified of the Department's decision by certified mail.
5. The applicant may appeal the Department's decision to District Court in accordance with the Administrative Procedure Act.

~~1.To successfully pass an examination on radon measurements, an individual must achieve or exceed the minimum passing scores on an examination provided by the National Environmental Health Association (NEHA) or the National Radon Safety Board (NRSB).~~

~~2.To successfully pass an examination on radon mitigation, an individual must achieve or exceed the minimum passing scores on an examination provided by the National Environmental Health Association (NEHA) or the National Radon Safety Board (NRSB).~~

~~11-014.04 Approval of Continuing Education Courses, Workshops, and Seminars~~

- ~~1. A course, workshop, or seminar about radon offered or sponsored by the Department will be accepted for the number of credits listed by the Department.~~
- ~~2. A course, workshop, or seminar about radon offered or approved by the National Environmental Health Association or the National Radon Safety Board will be accepted for the number of credits listed by the respective organization.~~
- ~~3. A course, workshop, or seminar about radon, not meeting the requirements of 180 NAC 11-014.04 item 1 or 2, that is attended or taught by the licensee will be accepted towards one hour of continuing education per hour of instruction and must apply for credit by submitting the following:
 - ~~a.Name, address, and telephone number of applicant;~~
 - ~~b.Biography or credentials of instructor;~~
 - ~~c.Type of course, frequency of course offerings, total hours of supervised instruction, and an agenda outlining the hours of instruction, describing the subject matter to be included; and~~
 - ~~d.A copy of the certificate issued upon completion of the course.~~~~

11-015 ADMINISTRATIVE PENALTY: The Department may assess an administrative penalty when evidence exists of practice without a license to practice a profession or operate a business. Practice without a license for the purpose of this regulation means practice:

REPORTING REQUIREMENTS

1. Prior to the issuance of a license;
2. Following the expiration of a license; or
3. Prior to the reinstatement of a license.

11-015.01 Evidence of Practice: The Department will consider any of the following conditions as prima facie evidence of practice without being credentialed:~~A radon measurement business or approved analytical laboratory must submit to the Department, by the last day of each month, the results of all radon measurements performed in the State of Nebraska during the previous month. The absence of radon measurements must be reported monthly to the Department.~~

1. The person admits to engaging in practice;
2. Staffing records or other reports from the employer of the person indicate that the person was engaged in practice;
3. Billing or payment records document the provision of service, care, or treatment by the person;
4. Service, care, or treatment records document the provision of service, care, or treatment by the person;
5. Appointment records indicate that the person was engaged in practice;
6. Government records indicate that the person was engaged in practice; and
7. The person opens a business or practice site and announces or advertises that the business or site is open to provide service, care, or treatment.

For purposes of this regulation, prima facie evidence means a fact presumed to be true unless disproved by some evidence to the contrary.

- ~~1. Residential radon measurement reports must contain the following:
 - ~~a. Name of property owner, and street address (including city, state, and Zip Code).~~
 - ~~b. Name of person performing measurement, testing dates, total time of measurement in hours, location of test device (including story and room), type of test device, device identification number, whether a radon mitigation system is present, and radon test results.~~
 - ~~c. Name and license number of radon measurement business and radon measurement specialist.~~~~
- ~~2. Nonresidential radon measurement reports must contain the following:
 - ~~a. Name of facility, type of facility, street address (including city, state, and Zip Code) and phone number, name of contact person, name of property owner.~~
 - ~~b. Name of person performing measurement, testing dates, total time of measurement in hours, location of test device (including story and~~~~

- ~~room), type of test device, device identification number, whether a radon mitigation system is present, and radon test results.~~
- ~~c. Name and license number of radon measurement business and radon measurement specialist.~~

~~11-015.02 Penalty: The Department may assess an administrative penalty in the amount of \$10 per day, not to exceed a total of \$1,000 for practice without a license. To assess the penalty, the Department will: Radon measurement businesses and radon mitigation businesses must report test results for radon in writing to the client. Any person who is informed of the results of radon measurements must also be informed of the date, test, name, and license number of the person who made the measurements. Radon results must be reported in picocuries per liter. Radon progeny results must be reported in working levels.~~

- ~~1. Provide written notice of the assessment to the person. The notice will specify:
 - ~~a. The total amount of the administrative penalty;~~
 - ~~b. The evidence on which the administrative penalty is based;~~
 - ~~c. That the person may request, in writing, a hearing to contest the assessment of an administrative penalty;~~
 - ~~d. That the Department will within 30 days following receipt of payment of the administrative penalty, remit the penalty to the State Treasurer to be disposed of in accordance with Article VII, section 5 of the Constitution of Nebraska; and~~
 - ~~e. That an unpaid administrative penalty constitutes a debt to the State of Nebraska which may be collected in the manner of a lien foreclosure or sued for and recovered in a proper form of action in the name of the state in the District Court of the county in which the violator resides or owns property. The Department may also collect in such action attorney's fees and costs incurred directly in the collection of the administrative penalty.~~~~
- ~~2. Send by certified mail, a written notice of the administrative penalty to the last known address of the person to whom the penalty is assessed.~~

~~11-015.03 Administrative Hearing: When a person contests the administrative penalty and requests a hearing, the Department will hold a hearing pursuant to the Administrative Procedure Act and 184 NAC 1, the Department's Rules of Practice and Procedure for Administrative Hearings. In addition, the radon measurement business must notify the client by telephone and mail within two business days of any measurement with results equal to or greater than 100 pCi/l or 0.5 WL and advise the client to contact the Department at 1-800-334-9491 or at other telephone numbers provided by the Department. The results of this measurement must also be provided to the Department by phone and mailed within the same two-business-day period.~~

~~11-015.04 The radon mitigation business must submit to the Department, by the last day of each month, a report on all mitigation work completed during the previous month, including the floor plans and equipment arrangement of the mitigation system, or modifications of existing systems, and the mitigation fee(s) (per installation) as specified~~

~~in 180 NAC 11-017.01, item 7. The absence of mitigation work must be reported monthly to the Department.~~

~~1. Residential radon mitigation reports must contain the following:~~

- ~~a. Name of property owner, and street address (including city, state, and Zip Code).~~
- ~~b. Pre-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).~~
- ~~c. Post-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).~~
- ~~d. Date mitigation completed and type of mitigation system(s) installed.~~
- ~~e. Name and license number of radon mitigation business and radon mitigation specialist.~~

~~2. Nonresidential radon mitigation reports must contain the following:~~

- ~~a. Name of facility, building street address (including city, state, and Zip Code), name and phone number of contact person, number of stories and number of occupied stories in building; name and address of property owner.~~
- ~~b. Pre-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).~~
- ~~c. Post-mitigation testing dates, location of test device (including story and room), type of test device, device identification number, radon test results, and measurement business responsible for tests (or occupant).~~
- ~~d. Date mitigation completed and type of mitigation system(s) installed.~~
- ~~e. Name and license number of radon mitigation business and radon mitigation specialist.~~

~~3. Fees specified in 180 NAC 11-017.01, item 7 must be submitted for each mitigation system installation. For fee calculation purposes, one mitigation installation is equivalent to any of the following:~~

- ~~a. Each individual house that has had a mitigation system installed or mitigation performed.~~
- ~~b. Each separate mitigation system or depressurization system in a nonresidential building or an apartment complex.~~

~~Example: Individual vent pipes from two suction points connected together to vent through one pipe, fan, and exhaust point is considered one system.~~

~~Example: Individual vent pipes from two suction points routed to vent through two separate pipes, fans, and exhaust points is considered two systems.~~

~~11-016 FEES (Nonrefundable except as provided by law) RECIPROcity: A person who has a valid license or certification from a state which licenses or certifies persons who measure or mitigate radon in a certification or licensing program with requirements determined by the Department as comparable with the provisions of this may be licensed by the Department upon submission of an application as specified in 180 NAC 11-005, 11-006, 11-007, 11-008, 11-009, and 11-010, with a copy of the certification or license from the other state, along with the fee specified in 180 NAC 11-017.~~

11-016.01 Initial and Renewal Fees for Individual Licenses

- | | | |
|----|------------------------------|----------|
| 1. | Radon Measurement Specialist | \$120.00 |
| 2. | Radon Mitigation Specialist | \$120.00 |

11-016.02 Initial and Renewal Fees for Business Licenses

- | | | |
|----|----------------------------|----------|
| 1. | Radon Measurement Business | \$200.00 |
| 2. | Radon Mitigation Business | \$500.00 |

11-016.03 Mitigation System Installation Fees

- | | | |
|----|---------------------------------|---------|
| 1. | Mitigation Fee per installation | \$50.00 |
|----|---------------------------------|---------|

11-016.04 Prorated Fee:

- When a Specialist license will expire within 180 days after its initial issuance date and the initial licensing fee is \$25 or more, the Department will collect \$25 or one-fourth of the initial licensing fee, whichever is greater, for the initial license, and the license will be valid until the next subsequent renewal date.

Proration Schedule
Year One (odd-numbered year)

Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
\$30	\$30	\$30	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120

Year Two (even-numbered year)

Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$30	\$30	\$30

- When a Radon Measurement Business license will expire within 180 days after its initial issuance date, the Department will collect a fee of \$50.00.

Proration Schedule

Year One (odd-numbered year)

<u>Jan</u>	<u>Feb</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
<u>\$50</u>	<u>\$50</u>	<u>\$50</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>

Year Two (even-numbered year)

<u>Jan</u>	<u>Feb</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$50</u>	<u>\$50</u>	<u>\$50</u>

3. When a Radon Mitigation Business license will expire within 180 days after its initial issuance date, the Department will collect a fee of \$125.00.

Proration Schedule

Year One (odd-numbered year)

<u>Jan</u>	<u>Feb</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
<u>\$125</u>	<u>\$125</u>	<u>\$125</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>

Year Two (even-numbered year)

<u>Jan</u>	<u>Feb</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$500</u>	<u>\$125</u>	<u>\$125</u>	<u>\$125</u>

11-016.05 Other Fees:

1. Certification of License Fee: For issuance of a certification of a license, the fee of \$25. The certification includes information regarding the basis on which a license was issued, the date of issuance, whether disciplinary action has been taken against the license, and the current status of the license.
2. Verification of License Fee: For issuance of a verification of a license the fee of \$5. The verification includes written confirmation as to whether a license was valid at the time the request was made.
3. Duplicate License Fee: For a duplicate of original license document or reissued license, the fee of \$10.
4. Administrative Fee: For a denied license or a withdrawn application, the administrative fee of \$25 will be retained by the Department.
5. Reinstatement Fee: For a reinstated license as provided for in 180 NAC 11-014, a fee of \$35 in addition to the renewal fee specified in 180 NAC 11-016.

These amended rules and regulations replace Title 180 NAC 11 Requirements for Radon and Radon Progeny Measurement and Mitigation Services, effective January 28, 2007.

~~11-017 FEES (Nonrefundable except as provided by law):~~

~~11-017.01 Fees for Radon Measurement Specialist, Radon Measurement Technician, Radon Mitigation Specialist and Radon Mitigation Technician listed below also include \$1.00 per year for the License Assistance Program:~~

~~1. Radon Measurement Specialist~~

~~Initial Application Fee \$ 45.00 + \$1.00 = \$46.00~~

~~Annual Renewal Fee \$ 45.00 + \$1.00 = \$46.00~~

~~2. Radon Measurement Technician~~

~~Initial Application Fee \$ 45.00 + \$1.00 = \$46.00~~

~~Annual Renewal Fee \$ 45.00 + \$1.00 = \$46.00~~

~~3. Radon Mitigation Specialist~~

~~Initial Application Fee \$ 45.00 + \$1.00 = \$46.00~~

~~Annual Renewal Fee \$ 45.00 + \$1.00 = \$46.00~~

~~4. Radon Mitigation Technician~~

~~Initial Application Fee \$ 45.00 + \$1.00 = \$46.00~~

~~Annual Renewal Fee \$ 45.00 + \$1.00 = \$46.00~~

~~5. Radon Measurement Business (Annual) Fee \$100.00~~

~~6. Radon Mitigation Business (Annual) Fee \$250.00~~

~~7. Mitigation Fee per installation \$ 50.00~~

~~8. a. Proration of Initial License Fee: For issuance of a specialist or technician license that will expire within 180 days after its initial issuance date, a fee of \$25 and \$1 for the Licensee Assistance Program fee.~~

~~c. Proration of Initial Radon Measurement Business License Fee: For issuance of a radon measurement business license that will expire within 180 days after its initial issuance date, a fee of \$50.00.~~

~~d. Proration of Initial Radon Mitigation Business License Fee: For issuance of a radon mitigation business license that will expire within 180 days after its initial issuance date, a fee of \$125.00.~~

~~9. Late Fee: By an applicant for renewal on an annual basis of a license, who fails to pay on or before the expiration date of his/her license, the fee of \$25 as a late fee in addition to the renewal fee.~~

~~10. Certification of License Fee: For issuance of a certification of a license, the fee of \$25. The certification includes information regarding the basis on which a license was issued, the date of issuance, whether disciplinary action has been taken against the license, and the current status of the license.~~

~~11. Verification of License Fee: For issuance of a verification of a license the fee of \$5. The verification includes written confirmation as to whether a license was valid at the time the request was made.~~

~~12. Duplicate License Fee: For a duplicate of original license document or reissued license, the fee of \$10.~~

~~13. Administrative Fee: For a denied license or a withdrawn application, the administrative fee of \$25 will be retained by the Department.~~

~~11-018 ADMINISTRATIVE PENALTY~~

~~11-018.01 Administrative Penalty: The Department may assess an administrative penalty when evidence exists that a person or entity practices without a license. Practice without a license for the purpose of this regulation means practice:~~

- ~~1. Prior to the issuance of a license;~~
- ~~2. Following the expiration of a license; or~~
- ~~3. Prior to the reinstatement of a license.~~

~~11-018.02 Evidence of Practice: The Department will consider any of the following conditions as prima facie evidence of practice without a license:~~

- ~~1. The person admits to engaging in practice;~~
- ~~2. Staffing records or other reports from the employer of the person indicate that the person was engaged in practice;~~
- ~~3. Billing or payment records document the provision of service, care, or treatment by the person;~~

- ~~4. Service, care, treatment records document the provision of service, care, or treatment by the person;~~
- ~~5. Appointment records indicate that the person was engaged in practice;~~
- ~~6. Other government records indicate that the person was engaged in practice; and~~
- ~~7. The person or entity opens a business or practice site and announces or advertises that the business or site is open to provide service, care, or treatment.~~

~~For purposes of this regulation prima facie evidence means a fact presumed to be true unless disproved by some evidence to the contrary.~~

~~11-018.03 Penalty: The Department may assess an administrative penalty in the amount of \$10 per day, not to exceed a total of \$1,000 for practice without a license. To assess such penalty, the Department will:~~

- ~~1. Provide written notice of the assessment to the person. The notice will specify:~~
 - ~~a. The total amount of the administrative penalty;~~
 - ~~b. The evidence on which the administrative penalty is based;~~
 - ~~c. That the person may request, in writing, a hearing to contest the assessment of an administrative penalty;~~
 - ~~d. That the Department will within 30 days following receipt of payment of the administrative penalty, transmit the penalty to the State Treasurer for credit to the Permanent School Fund; and~~
 - ~~e. That an unpaid administrative penalty constitutes a debt to the State of Nebraska which may be collected in the manner of a lien foreclosure or sued for and recovered in a proper form of action in the name of the state in the District Court of the county in which the violator resides or owns property.~~
- ~~2. Send by certified mail, a written notice of the administrative penalty to the last known address of the person to whom the penalty is assessed.~~

~~11-018.04 Administrative Hearing: When a person contests the administrative penalty and requests a hearing, the Department will hold a hearing pursuant to Neb. Rev. Stat. §§ 84-901 to 84-920 and the Department's rules and regulations adopted pursuant to these statutes.~~

EFFECTIVE DATE
JANUARY 28, 2007

~~RADON MEASUREMENT SPECIALIST OR TECHNICIAN LICENSE APPLICATION~~

~~PER Title 180, Regulations for Control of Radiation, Chapter 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services.~~

APPLICATION FOR: (Check only one)

~~[] RADON MEASUREMENT SPECIALIST 180 NAC 11-005
[] RADON MEASUREMENT TECHNICIAN 180 NAC 11-006~~

~~RADON LICENSURE FEES~~

~~Determine the month in which you are submitting your application. Pay the amount in the corresponding box per license you are applying for. All fees are nonrefundable except as provided by law.~~

Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oet	Nov	Dec
\$26	\$26	\$26	\$46	\$46	\$46	\$46	\$46	\$46	\$26	\$26	\$26

~~PART I. APPLICANT INFORMATION~~

~~Name _____ Social Security # _____~~

~~Permanent Mailing Address _____~~

~~City _____ State _____ Zip Code _____~~

~~Telephone Numbers Home _____ Work _____~~

~~E-Mail Address _____ Birth date _____~~

~~Has your license in any profession in another state been revoked, suspended, limited, or disciplined in any manner? YES _____ NO _____
If yes, applicant must provide an official copy of the disciplinary action.~~

~~Have you been convicted of a misdemeanor or felony? YES _____ NO _____
If yes, applicant must contact Nebraska Radon Program office for additional direction.~~

TRAINING:

~~Name of Course _____ Dates of Attendance _____ Location _____~~

EFFECTIVE DATE
JANUARY 28, 2007

- ~~Attach a copy of your training certificate or a letter of successful completion and a copy of your exam results.~~

PART II. ATTESTATION

~~I attest that this application has been prepared in accordance with 180 NAC 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services and all information contained herein, including any supplements attached hereto, is true and correct to the best of my knowledge and belief.~~

Signature of Applicant _____ Date

~~Send your letter of application, attachments and appropriate fee (See 180 NAC 11-017), with **check(s) made payable to Nebraska Department of Health and Human Services Regulation and Licensure** to:~~

~~Nebraska Radon Program
NDHHS R&L
P.O. Box 95007
301 Centennial Mall South
Lincoln, NE 68509-5007~~

~~Omission of any of the required documents or incomplete information will delay review of your application and issuance of a license.~~

EFFECTIVE DATE
JANUARY 28, 2007

~~RADON MITIGATION SPECIALIST OR TECHNICIAN LICENSE APPLICATION~~

~~PER Title 180, Regulations for Control of Radiation, Chapter 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services.~~

~~APPLICATION FOR:~~ (Check only one)

~~[] RADON MITIGATION SPECIALIST 180 NAC 11-007~~

~~[] RADON MITIGATION TECHNICIAN 180 NAC 11-008~~

~~RADON LICENSURE FEES~~

~~Determine the month in which you are submitting your application. Pay the amount in the corresponding box per license you are applying for. All fees are nonrefundable except as provided by law.~~

Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
\$26	\$26	\$26	\$46	\$46	\$46	\$46	\$46	\$46	\$26	\$26	\$26

~~PART I. APPLICANT INFORMATION~~

~~Name _____ Social Security # _____~~

~~Permanent Mailing Address _____~~

~~City _____ State _____ Zip Code _____~~

~~Telephone Numbers Home _____ Work _____~~

~~E-Mail Address _____ Birth date _____~~

~~Has your license in any profession in another state been revoked, suspended, limited, or disciplined in any manner? YES _____ NO _____
If yes, applicant must provide an official copy of the disciplinary action.~~

~~Have you been convicted of a misdemeanor or felony? YES _____ NO _____
If yes, applicant must contact Nebraska Radon Program office for additional direction.~~

~~TRAINING:~~

~~Name of Course _____ Dates of Attendance _____ Location _____~~

EFFECTIVE DATE
JANUARY 28, 2007

- ~~Attach a copy of your training certificate or a letter of successful completion and a copy of your exam results.~~

EXPERIENCE:

Name of Business _____ Name of Supervisor _____ Dates Employed _____

- ~~Attach a copy of your resume.~~

EDUCATION: (If applicable)

College or University _____ Dates of Attendance _____ Primary Course of Study _____ Degree _____

- ~~Attach a copy of your transcript.~~

PART II. ATTESTATION

~~I attest that this application has been prepared in accordance with 180 NAC 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services and all information contained herein, including any supplements attached hereto, is true and correct to the best of my knowledge and belief.~~

Signature of Applicant _____ Date _____

~~Send your letter of application, attachments and appropriate fee (See 180 NAC 11-017), with~~
check(s) made payable to Nebraska Department of Health and Human Services Regulation and Licensure to:

Nebraska Radon Program
NDHHS-R&L
P.O. Box 95007
301 Centennial Mall South
Lincoln, NE 68509-5007

EFFECTIVE DATE

JANUARY 28, 2007

~~Omission of any of the required documents or incomplete information will delay review of your application and issuance of a license.~~

EFFECTIVE DATE
JANUARY 28, 2007

RADON BUSINESS LICENSE APPLICATION

~~PER Title 180, Regulations for Control of Radiation, Chapter 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services~~

APPLICATION FOR: (Check only one) _____

☐ ~~RADON MEASUREMENT BUSINESS~~ _____

☐ ~~RADON MITIGATION BUSINESS~~ _____

PART I. APPLICANT INFORMATION

Name of Applicant _____

Name of Business _____

Street Address _____

City _____ State _____ Zip Code _____

Telephone Numbers Phone _____ FAX _____

E-Mail Address _____

PART II. RADON MEASUREMENT BUSINESS

Analytical Laboratories to Be Used

Name of Laboratory Name of Laboratory

Street Address Street Address

City _____ State _____ Zip Code _____ City _____ State _____ Zip Code

Attachments

~~Description of all radon measurement techniques and services offered, the purpose of each service, the type of measurement equipment, a summary of the procedure to be used, and an explanation of how that equipment and procedure will meet the intended purpose.~~

~~Copies of licenses of all radon measurement specialists and technicians employed or used as consultants.~~

~~Description of the quality assurance and quality control plans for each service and technique provided.~~

~~Sample copy of all reporting forms used to inform clients of measurement results, including any guidance concerning the need for further measurements or mitigation.~~

~~Description of the health and safety program to estimate employees' exposure to radon during employment.~~

EFFECTIVE DATE
JANUARY 28, 2007

Fees

~~Determine the month in which you are submitting your application. Pay the amount in the corresponding box. All fees are nonrefundable except as provided by law.~~

Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
\$50	\$50	\$50	\$100	\$100	\$100	\$100	\$100	\$100	\$50	\$50	\$50

PART III. RADON MITIGATION BUSINESS

Licensed Radon Measurement Businesses and Specialists to Be Used

~~Name of Laboratory~~ Name of Laboratory

~~Street Address~~ Street Address

~~City~~ _____ ~~State~~ _____ ~~Zip Code~~ _____ ~~City~~ _____ ~~State~~ _____ ~~Zip Code~~

Attachments

~~Description of all mitigation materials and systems offered, diagnostic tests performed, and other related services.~~

~~Description of procedures and instruments used to perform diagnostic tests.~~

~~Copies of licenses of all radon mitigation specialists and technicians employed or used as consultants.~~

~~Sample copy of each reporting form given to clients.~~

~~Description of the health and safety program to estimate employees' exposure to radon during employment.~~

Fees

~~Determine the month in which you are submitting your application. Pay the amount in the corresponding box. All fees are nonrefundable except as provided by law.~~

Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
\$125	\$125	\$125	\$250	\$250	\$250	\$250	\$250	\$250	\$125	\$125	\$125

PART IV. ATTESTATION

~~I attest that this application has been prepared in accordance with 180 NAC 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services and all information contained~~

EFFECTIVE DATE

JANUARY 28, 2007

~~herein, including any supplements attached hereto, is true and correct to the best of my knowledge and belief.~~

Signature of Applicant _____ Date

~~Send your letter of application, attachments and appropriate fee (See 180 NAC 11-017), with check(s) made payable to Nebraska Department of Health and Human Services Regulation and Licensure to:~~

~~Nebraska Radon Program
NDHHS-R&L
P.O. Box 95007
301 Centennial Mall South
Lincoln, NE 68509-5007~~

~~Omission of any of the required documents or incomplete information will delay review of your application and issuance of a license.~~

EFFECTIVE DATE
JANUARY 28, 2007

Radon Laboratory Approval Application

~~PER Title 180, Regulations for Control of Radiation, Chapter 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services~~

PART I. APPLICANT INFORMATION

Name of Applicant _____

Name of Business _____

Street Address _____

City _____ State _____ Zip Code _____

Telephone Numbers Phone _____ FAX _____

E-Mail Address _____

~~Is the laboratory participating in a national proficiency program? [] YES [] NO If yes, complete information below:~~

~~Name _____ of _____ Proficiency Program _____~~

~~Accreditation _____ Number _____ Expiration Date _____~~

~~☐ Provide a list by name, training, and experience of all specialists performing radon or radon progeny analysis.~~

~~☐ Attach completed measurement specialist application(s) and fee.~~

~~☐ Attach completed measurement business application and fee.~~

~~☐ Attach a description of the method used to calibrate radon measurement analysis instruments.~~

~~List instrumentation to be used for radon and/or radon progeny measurement. Attach additional sheets if necessary.~~

Type	Manufacturer	Model #	Serial #	Calibration frequency

PART II. ATTESTATION

~~I attest that this application has been prepared in accordance with 180 NAC 11, Requirements for Radon and Radon Progeny Measurement and Mitigation Services and all information contained herein, including any supplements attached hereto, is true and correct to the best of my knowledge and belief.~~

Signature of Applicant _____ Date _____

EFFECTIVE DATE

JANUARY 28, 2007

~~Send your letter of application, attachments and appropriate fee (See 180 NAC 11-017), with check(s) made payable to Nebraska Department of Health and Human Services Regulation and Licensure to:~~

~~NDHHS R&L Radon Program~~

~~P.O. Box 95007~~

~~301 Centennial Mall South~~

~~Lincoln, NE 68509-5007~~

~~Omission of any of the required documents or incomplete information will delay review of your application.~~