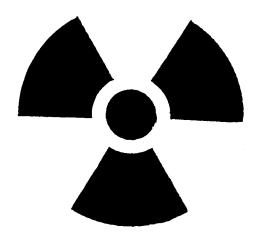


CONTROL OF RADIATION HAZARD REGULATIONS Radon



Chapter 64E-5 Parts X and XII Florida Administrative Code

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This has been provided to you by the following Bureau.

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This is not a complete copy of Chapter 64E-5. Contact the appropriate Bureau of Radiation Control Section listed below for a copy of those parts not included in this version.

PARTS I, III, IV, V, VII, VIII, and ATTACHMENTS
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PART X ENVIRONMENTAL RADIATION STANDARDS

PART X A RADIATION STANDARDS FOR BUILDINGS

64E-5.1001 Standards.

- (1) Radiation exposure to the public from naturally occurring radioactive materials shall be maintained as low as reasonably achievable. For the purposes of this part, the normal background level of gamma radiation in buildings is 6 microroentgens (1.55 nC/kg) per hour and the normal background radon decay product concentration in buildings is 0.004 Working Level (WL).
- (2) The mean gamma exposure rate in a building shall not exceed 20 microroentgens (5.16 nC/kg) per hour, including background, and the annual average radon decay product concentration shall not exceed 0.02 WL, including background.

Rulemaking Authority 404.051, 404.056 FS. Law Implemented 404.022(2), 404.051(4), 404.056 FS. History–New 2-16-86, Amended 1-3-89, Formerly 10D-91.1104.

PART XII RADON REQUIREMENTS

64E-5.1201 Radon Requirements and Enforcement.

- (1) This part establishes rules, requirements and procedures for the certification of radon measurement and mitigation specialists, technicians and businesses, and the protocols for mandatory measurements.
- (2) The General Statement of Policy and Procedures for Radon Enforcement Actions January 1993, which is available from the department and which is incorporated herein by reference, will be used to determine enforcement actions.

Rulemaking Authority 404.042, 404.051, 404.056 FS. Law Implemented 404.051(1), (3), (7), 404.056 FS. History–New 1-3-89, Amended 12-9-96, Formerly 10D-91.1301.

PART XII A

CERTIFICATION OF PERSONS WHO PERFORM RADON MEASUREMENT AND MITIGATION

64E-5.1202 Definitions.

The following definitions shall be applicable to this part:

(1) "Business day" means any day of the year, exclusive of Saturdays, Sundays, and State of Florida holidays.

- (2) "Diagnostic tests" means tests performed or procedures used to determine appropriate mitigation methods for a building.
- (3) "Certified person" or "certified individual" means a certified radon measurement specialist, certified radon measurement business, certified radon measurement technician, certified radon mitigation business, certified radon mitigation specialist or certified radon mitigation technician as defined by this part.
- (4) "Certified radon measurement business" means a commercial business which provides onsite measurement services for radon or radon progeny and which meets the requirements for certification provided by this part. For the purpose of this section, an analytical service provider which does not perform on-site measurement services directly to the public is not considered a radon measurement business.
- (5) "Certified radon measurement specialist" means an individual who performs on-site radon or radon progeny measurements; provides professional advice on such radon or radon progeny measurements, health risks, radon-related exposure, radon entry routes, and other radon-related activities; and meets the requirements for certification provided by this part.
- (6) "Certified radon measurement technician" means an individual who performs onsite radon or radon progeny measurement activities, provides information on measurement results, and meets the requirements for certification provided by this part. Such an individual can perform these activities only under the supervision of a certified radon measurement specialist.
- (7) "Certified radon mitigation business" means a commercial business which designs or installs systems in existing buildings to mitigate radon or radon progeny contamination and which meets the requirements for certification provided by this part.
- (8) "Certified radon mitigation specialist" means an individual who performs or evaluates diagnostic tests to determine appropriate radon or radon progeny mitigation strategies for a building, designs and installs mitigation systems, and meets the requirements for certification provided by this part.
- (9) "Certified radon mitigation technician" means an individual who installs or supervises the installation of radon or radon progeny mitigation techniques on existing buildings and meets the requirements for certification provided by this part. Such an individual can perform these activities only under the supervision of a certified radon mitigation specialist.
- (10) "Mitigate" means to apply materials or install systems and materials to reduce radon or radon progeny concentrations in the indoor atmosphere or to prevent entry of radon or radon

progeny into the indoor atmosphere.

- (11) "Picocurie per liter (pCi/l)" means 2.22 disintegrations per minute of radioactive material per liter. One picocurie is equivalent to 10-12 Curies.
- (12) "Radon" means the radioactive noble gas radon 222.
- (13) "Radon progeny" means the short-lived radionuclides formed as a result of the decay of radon 222, including polonium 218, bismuth 214, lead 214, and polonium 214.
- (14) "Working level (WL)" means the concentration of short-lived radon progeny that will result in 130,000 million electron volts of potential alpha particle energy per liter of air. Working level is a measure of radon progeny concentration in air.

Rulemaking Authority 404.042, 404.051, 404.056 FS. Law Implemented 404.051(1), (3), (4), 404.056 FS. History–New 1-3-89, Amended 5-21-90, 10-24-90, 1-18-94, 12-9-96, Formerly 10D-91.1303.

64E-5.1203 General Provisions.

- (1) No person may test for or mitigate the presence of radon in Florida for a fee or other remuneration unless such person has been certified as provided by this part. These regulations in no way exempt any person from other state and local occupational licensure requirements.
- (2) The certification requirements of this part shall not apply to a commercial business that subcontracts radon measurements to a certified radon business when the complete radon report from the certified radon business is provided to the client and interpretations of the results are provided by the certified business.
- (3) No certification shall be approved unless the applicant demonstrates to the department that the following conditions are met:
- (a) The applicant has not been found to be in violation of Chapter 404, F.S., or this part, and has not been decertified;
- (b) The applicant has filed an accurate and complete application with the application fee describing compliance with the relevant certification requirements.
- (4) Requirements for continued certification shall include the following conditions:
- (a) The certified person shall conduct his activities as described in the approved certification and shall remain in compliance with Chapter 404, F.S., and this part.
- (b) The certified person or business shall allow authorized representatives of the department to have access during normal business hours to his facilities, offices and files for inspection and examination of radon-related records, measurement procedures and mitigation system design and installations. The certified person or business shall identify the location and allow authorized representatives of the department to inspect all

locations where the certified person or business has conducted or contracted for onsite radon measurement or mitigation activities.

- (c) The certified person or business shall report the following changes in writing to the department within 10 business days of the change: changes to the name or address of a certified individual or business; changes in the information provided with the original business application, including changes in certified personnel; changes in analytical service providers used; changes in measurement, mitigation or analytical service proficiency status; and changes to the measurement or mitigation methods used. New measurement methods shall comply with the Quality Assurance Plan requirements specified in subsection 64E-5.1206(5), F.A.C.
- d) The certified business shall provide radon activity reports to the department by the 15th of each month for the previous month.
- Reports from certified 1. а measurement business shall include building information, the name of the person performing the measurements and the results of all available radon and radon progeny measurements taken during the previous month which are not otherwise reported as specified in Rule 64E-5.1208, F.A.C. If no measurements were taken during a month, the report shall indicate none were taken. Data shall be submitted on form DH1750, Monthly Report for Radon Businesses, Residential Certified Measurement Report (11/15), or form DH1833, Monthly Report for Certified Radon Businesses, Nonresidential Measurement Report incorporated by reference and available from the department at 4025 Esplanade Way, Room 205, Tallahassee. Florida, at http://radon.floridahealth.gov. at http://www.flrules.org/Gateway/reference.asp?No=R ef-08100, and http://www.flrules.org/Gateway/reference.asp?No=R ef-08101, respectively.
- 2. A certified radon mitigation business shall include building information on all radon mitigation work completed during the previous month, the name of the certified radon measurement business and individual performing the pre-mitigation and post-mitigation radon and radon measurements, and the measurement results. If no radon mitigations were completed or performed during a calendar month, the report shall indicate none were completed or performed. Unless otherwise reported as a completed project, for all inprogress mitigation projects not completed within 30 days of initiation of the mitigation, the certified radon mitigation business shall file a report with the department by the 15th day of the first calendar month that begins on or after the end of the 30 days. This report shall include building location information and anticipated date of mitigation completion.

Reports of completed radon mitigations shall be submitted on form DH1753, Monthly Report for Certified Radon Businesses, Radon Mitigation Report (11/15), while reports of in progress radon mitigation projects shall be submitted on form DH8002-DCHP, Notice of in Progress Radon Mitigation System Installation (02/16), incorporated by reference and available from the department at 4025 Esplanade Way, Room 205, Tallahassee, Florida, at http://radon.floridahealth.gov, and at http://www.flrules.org/Gateway/reference.asp?No=R ef-08102, and http://www.flrules.org/Gateway/reference.asp?No=R ef-08105, respectively. Mitigation businesses are not required to file more than one form DH 1753 on the same completed project

- (5) Prior to performing radon measurement or radon mitigation services, including sample collection, analysis, or interpretation of measurement results a certified individual shall own, be employed by, or be retained as a consultant to a certified radon measurement or certified radon mitigation business.
- (6) A certification will be valid for 1 year following the date of issuance. If renewal is requested more than 90 days after an expired certification, a new application must be submitted for recertification. After 1 year, previously certified applicants must attend a department-approved training course. A duplicate certificate can be obtained by written request to the department and payment of a five dollar fee.
- (7)(a) A request for annual certification renewal shall be submitted with a nonrefundable renewal fee. For renewal requests received prior to expiration of the certification, the fee schedule set forth in this part will apply. For renewal requests received after certification has expired, the fee schedule for application and certification will apply. A certification renewal shall be issued or denied according to the criteria set forth in this part.
- (b) Annual certification renewal fee schedule:
- 1. Radon Measurement or Mitigation Business Renewal request received between July 1, 2011 and June 30, 2016: \$425.00
- Renewal request received on or after July 1, 2016: \$500.00
- 2. Radon Measurement or Mitigation Specialist Renewal request received between July 1, 2011 and June 30, 2016: \$350.00
- Renewal request received on or after July 1, 2016: \$400.00
- 3. Radon Measurement or Mitigation Technician Renewal request received between July 1, 2011 and June 30, 2016: \$275.00
- Renewal request received on or after July 1, 2016: \$300.00
- (8) A certified individual in good standing who becomes an active duty member of the Armed

Forces of the United States prior to the expiration of the renewal period shall remain in good standing while on active duty and for a period of 6 months after discharge from active duty. No radon measurement or mitigation activity for which certification is required shall be conducted after the expiration of the term of certification.

- ((9) A certified individual in good standing who is absent from the state because of their spouse's active duty with the Armed Forces of the United States prior to the expiration of the renewal period shall remain in good standing while their spouse is on active duty and for a period of 6 months after their spouse's discharge from active duty. No radon measurement or mitigation activity for which certification is required shall be conducted after the expiration of the term of certification.
- (10) All applications must clearly label any information considered trade secrets and must segregate such information from other information.
- (11) The department will approve training courses for certification based upon evaluation of course materials and content. These courses shall meet the following requirements:
- (a) The course subjects shall be applicable to Florida, shall enable the students to meet training objectives provided by the department and shall include at least the following:
 - 1. Radon Measurement Specialist Training.
- a. Two hours of instruction on radioactivity, radon, and radon's health effects.
- b. One and one-half hours of instruction on Florida's radon legislation and administrative rules and federal radon legislation and proficiency programs.
- c. Two and one-half hours of instruction on radon entry and behavior.
- d. One hour of instruction on worker health and safety.
- e. Seven hours of instruction on radon measurement devices, techniques and protocols.
- f. One and one-quarter hours of instruction on building investigation and diagnostics and mitigation strategies and techniques applicable to Florida.
- g. One-half hour of instruction on radonresistant building techniques for new construction applicable to Florida.
- h. One hour of instruction on measurement and mitigation techniques for radon in domestic water.
 - 2. Radon Measurement Technician Training.
- a. One and one-quarter hours of instruction on radioactivity, radon, and radon's health effects.
- b. One and one-half hours of instruction on Florida's radon legislation and administrative rules and federal radon legislation and proficiency programs.
- c. One and three-quarters hours of instruction on radon entry and behavior.

- d. One hour of instruction on worker health and safety.
- e. Five hours of instruction on radon measurement devices, techniques and protocols, including 1 hour of experience deploying, retrieving and reporting results of various measurement devices.
- f. One-half hour of instruction on mitigation strategies and techniques applicable to Florida.
- g. One-half hour of instruction on radonresistant building techniques for new construction applicable to Florida.
- One-half hour of instruction measurement and mitigation techniques for radon in domestic water.
 - 3. Radon Mitigation Specialist Training.
- a. Two hours of instruction on radioactivity, radon, and radon's health effects.
- b. One and one-half hours of instruction on Florida's radon legislation and administrative rules and federal radon legislation and proficiency programs.
- c. Two and one-half hours of instruction on radon entry and behavior.
- d. One hour of instruction on worker health and safety.
- e. Three-quarters hour of instruction on measurement devices, techniques and protocols.
- f. One-half hour of instruction on radonresistant building techniques for new construction applicable to Florida.
- g. One hour of instruction on measurement and mitigation techniques for radon in domestic water.
- h. Three and one-half hours of instruction on building investigation and diagnostics and mitigation strategies and techniques applicable to Florida.
- i. Six and one-half hours of instruction on mitigation system theory, design and installation applicable to Florida.
 - 4. Radon Mitigation Technician Training.
- a. One and one-quarter hours of instruction on radioactivity, radon, and radon's health effects.
- b. One and one-half hours of instruction on Florida's radon legislation and administrative rules and federal radon legislation and proficiency programs.
- c. One and three-quarters hours instruction on radon entry and behavior.
- d. One hour of instruction on worker health and safety.
- e. Three-quarters hour of instruction on measurement devices, techniques and radon protocols.
- f. One-half hour of instruction on radonresistant building techniques for new construction applicable to Florida.
- g. Three-quarters hour of instruction on measurement and mitigation techniques for radon in

domestic water.

- h. Three hours of instruction on building investigation and diagnostics and mitigation strategies and techniques applicable to Florida.
- i. Five hours of instruction on mitigation system theory and installation applicable to Florida.
- (b) Participants shall be given an opportunity to evaluate in writing the learning experiences, instructors, instructional methods, facilities and resources used for the course. Results of these evaluations shall be available for inspection by the department for 3 years after completion of the course.
- (c) The subject matter shall be kept current and represent accepted protocols and techniques.
- (d) The course provider shall furnish each participant who has attended the entire course a written verification of completion which includes:
 - 1. Date of course,
 - 2. Signature and name of provider,
 - 3. Course title; and,
 - 4. Name of participant.
- (e) Course providers shall send to the department a roster of participants who have attended the entire course within 30 days after each course on form DH 1812, Radon Certification Training Roster (11/15), incorporated by reference and available from the department at 4025 Esplanade Way, Room 205, Tallahassee, Florida, at http://radon.floridahealth.gov, and http://www.flrules.org/Gateway/reference.asp?No=R ef-08106. Providers shall maintain security of attendance records. Course providers shall maintain records of individual courses for 3 years after completion of the course for inspection by the department.
- (f) A course provider seeking approval to conduct a radon certification training course shall make application on form DH 1813, Application to Become a Radon Certification Training Course Provider (11/15), incorporated by reference and available from the department at 4025 Esplanade Room 205. Tallahassee. Florida. Wav. http://radon.floridahealth.gov, and http://www.flrules.org/Gateway/reference.asp?No=R ef-08107.
- (g) The course provider also shall submit to the department a copy of the proposed curriculum, all training materials, and information concerning the proposed instructors.
- (h) The course provider shall allow authorized representatives of the department to observe and evaluate training sessions, instructors and course material without charge.
- (i) Any proposed changes in course materials or instructors shall be reported in writing to the department at least 15 business days before implementation of the change.
 - (j) Approval of a course shall be valid for a

period of 24 months. Approval may be denied or withdrawn by the department if the course approval requirements of these rules are not met.

Rulemaking Authority 404.051, 404.056 FS. Law Implemented 404.051, 404.056, 404.071 FS. History–New 1-3-89, Amended 5-21-90, 10-24-90, 1-18-94, 12-9-96, Formerly 10D-91.1304, Amended 3-16-09, 4-13-17.

64E-5.1204 Certification Requirements for Radon Measurement Specialists and Technicians.

- (1) The following is required for certification as a radon measurement specialist and measurement technician:
- (a) The individual shall submit an application on form DH 1751, Application for Certification as Specialist Technician Radon or (11/15),incorporated by reference and which is available from the department at 4025 Esplanade Way, Room Tallahassee. Florida. http://radon.floridahealth.gov. and at http://www.flrules.org/Gateway/reference.asp?No=R ef-08108. The application shall include the nonrefundable application and certification fee according to the fee schedule set forth in this section and documentation of the applicant's relevant education and experience, as specified on form DH 1751, Application for Radon Certification as Radon Specialist or Technician.
- (b) Individuals who have never been certified must have attended within the last 2 years of the training examination date a course on radon measurement that has been approved by the department. The technician applicant also shall have received a score of 65 percent or greater on the measurement technician training examination to be administered by the department at least three times per year. The specialist applicant also shall have received a score of 75 percent or greater on the measurement specialist training examination to be administered by the department at least three times each year. If a specialist applicant receives a score of less than 75 percent but greater than or equal to 65 percent, he can be certified as a measurement technician by making a written request to the department for a change from specialist to technician. If an applicant wishes to be reexamined for specialist or technician certification, he must reapply by submitting a completed application with experience history and a \$200 nonrefundable application and certification fee. On approval of the new application, the applicant can take the next scheduled department exam. Applicants can review their exam results during normal working hours at the department's office in Tallahassee by requesting an appointment at least 5 business days prior to the review.

- (c) Application and certification fee schedule:
- 1. Radon Measurement Specialist Application request received on or before June 30, 2016: \$375.00 Application request received on or after July 1, 2016:

Application request received on or after July 1, 2016: \$425.00

2. Radon Measurement Technician Application request received on or before June 30, 2016: \$300.00 Application request received on or after July 1, 2016: \$325.00

(2) In addition to the above, a measurement specialist applicant shall possess 4 years of relevant radiation or radiological safety professional or work experience. Relevant post-secondary education may be substituted on a year for year basis for 3 of the 4 years of relevant professional or work experience. post-secondary education curriculum in a natural science, engineering, radiation, radiological safety or health physics, mathematics or statistics. An academic year shall be 30 semester hours at a C- grade level or better, of which at least 10 hours shall be in the above subject areas, or 45 quarter hours at a C- grade level or better, of which at least 15 hours shall be in the above subject areas. For other relevant radiation education such as military or technical school training, 15 classroom hours of instruction shall be equivalent to 1 credit hour of college level course work. Full time training and advanced military courses will be evaluated by the department to determine their academic equivalent. Relevant professional or work experience includes radiation instrumentation, radiation radiation physics. protection, radiation biology, and radiation risk communication. Professional or work experience also shall include employment in such occupations as nuclear medicine technologist, radiation therapy technologist, radiographer, health physicist, military health physics specialist, nuclear navy engineering lab technician, health physics technician, hospital radiation safety officer, or occupations requiring equivalent experience.

Rulemaking Authority 404.051, 404.056, 404.071 FS. Law Implemented 404.051, 404.056, 404.071 FS. History–New 1-3-89, Amended 5-21-90, 10-24-90, 1-18-94, 12-9-96, Formerly 10D-91.1305, Amended 3-16-09, 4-13-17.

64E-5.1205 Certification Requirements for Radon Mitigation Specialists and Technicians.

- (1) The following is required for certification as a radon mitigation specialist and technician:
- (a) The individual shall submit an application on form DH 1751, Application for Certification as Radon Specialist or Technician, (11/15) (incorporated in Rule 64E-5.1204, F.A.C.), a

nonrefundable application and certification fee according to the fee schedule set forth in this section, and documentation of the applicant's relevant education and experience, as specified on form DH 1751, Application for Radon Certification as Radon Specialist or Technician.

- ((b) Individuals who have never been certified must have attended within 2 years of the training examination date a course on radon diagnostics and mitigation that has been approved by the department. The technician applicant also shall have received a score of 60 percent or greater on the mitigation technician training examination to be administered by the department at least three times per year. The specialist applicant also shall have received a score of 70 percent or greater on the mitigation specialist training examination to be administered by the department at least three times each year. If a specialist applicant receives a score of less than 70 percent but greater than or equal to 60 percent, he can be certified as a mitigation technician by making a written request to the department for a change from specialist to technician. If an applicant wishes to be reexamined for specialist or technician certification, he must reapply by submitting a completed application with experience history and a nonrefundable \$200.00 application and certification fee. After approval of the new application, the applicant can take the next scheduled department exam. Applicants can review their exam results during normal working hours at the department's office in Tallahassee by requesting an appointment at least 5 business days prior to the review.
- (c) Application and certification fee schedule:
- 1. Radon Mitigation Specialist
 Application request received on or before June 30, 2016: \$375.00
 Application request received on or after July 1, 2016:
- Application request received on or after July 1, 2016: \$425.00
- 2. Radon Mitigation Technician
 Application request received on or before June 30, 2016: \$300.00
 Application request received on or after July 1, 2016:

Application request received on or after July 1, 2016: \$325.00

(2) In addition to the above, a mitigation specialist applicant shall possess a valid residential, building or general contractor's license issued by the State of Florida, or possess 4 years of relevant professional or work experience. Relevant postsecondary education may be substituted on a year for year basis for 3 of the 4 years of relevant professional or work experience. Relevant postsecondary education includes curriculum architecture, engineering, building construction, or the physical sciences. Relevant professional or work experience includes the design or construction of buildings, or associated heating, ventilation, and air conditioning systems, or closely related activities.

Rulemaking Authority 404.051, 404.056, 404.071 FS. Law Implemented 404.051, 404.056, 404.071 FS. History–New 1-3-89, Amended 5-21-90, 10-24-90, 1-18-94, 12-9-96, Formerly 10D-91.1306, Amended 3-16-09, 4-13-17.

64E-5.1206 Certification Requirements for Radon Measurement Businesses.

The following qualifications are required for certification as a radon measurement business:

(1) Submission of an application for certification on form DH 1749, Application for Certification as a Radon Business (11/15), incorporated by reference and which is available from the department, at 4025 Esplanade Way, 205, Room Tallahassee, Florida, at http://radon.floridahealth.gov, and at http://www.flrules.org/Gateway/reference.asp?No=R ef-08109, and a nonrefundable application and certification fee from the following schedule:

Application request received on or before June 30, 2016:\$450.00

Application request received on or after July 1, 2016:\$525.00

- (2) Identification of all radon and radon progeny measurement methods or related services to be offered, including the purpose of each measurement service, the type of measurement equipment and a summary of the procedure to be used in performing the service. All measurements reported to clients shall be performed with devices that meet measurement proficiency requirements of a program recognized by the U.S. Environmental Protection Agency (USEPA) or the Department as a program capable of evaluating measurement proficiency. USEPA Indoor Radon and Radon Decay Product Measurement Device Protocols, Publication No. EPA 402-R-92-004 (revised 7/1992) and USEPA Protocols for Radon and Radon Decay Product Measurements in Homes, Publication No. EPA 402-R-92-003 (revised 5/1993), which are herein incorporated by reference and which are available from the department at 4025 Esplanade Room 205, Tallahassee, Florida, at http://radon.floridahealth.gov, and at http://www.flrules.org/Gateway/reference.asp?No=R ef-08110. http://www.flrules.org/Gateway/reference.asp?No=R ef-08111, respectively, shall be followed for all measurements reported to clients with the exception of nonresidential measurements performed as specified in Rule 64E-5.1208, F.A.C.
- (3)Identification of certified radon measurement specialists and certified radon measurement technicians who will perform measurements for the applicant. An applicant shall maintain on staff or retain as a consultant a certified radon measurement specialist. All radon or radon progeny measurements will be performed only by

certified radon measurement specialists or certified radon measurement technicians. This shall include the initial placement and final retrieval of all measurement devices. The certified radon measurement specialist shall monitor the applicant's measurement activities and shall review, approve, and sign monthly reports to the department, assess quality assurance and quality control measures, evaluate operating procedures, and compliance with state and federal regulations. The certified radon measurement specialist shall be present when requested by the department during scheduled visits by the department and shall physically observe and evaluate each certified radon measurement technician in the performance of his measurement duties at least once each calendar quarter to insure adequate supervision. A record of this evaluation shall be signed by the specialist and maintained on file by the business. If the measurement reports submitted to meet the requirements of paragraph 64E-5.1203(4)(d), and subsection 64E-5.1208(3), F.A.C., show that no radon or radon progeny measurements were performed during an entire calendar quarter by any of the certified radon measurement technicians working for a certified radon measurement business, the visit, observation and evaluation by the specialist are not required for that quarter. The quarterly visit, observations and evaluations by the specialist must be resumed within the same calendar quarter in which measurement activities are resumed. The interval between visits, observations and evaluations by the specialist shall not exceed 1 year.

- (4) Identification of the proficient analytical service providers which will process devices for all measurement methods used by the business. Should a radon measurement business choose to analyze devices or obtain results directly from measurement instruments, it must maintain proficiency as an analytical service provider with each measurement method by participating in a program recognized by the USEPA or the Department as a program capable of evaluating measurement proficiency.
- (5) Disclosure and adherence to a plan of quality assurance and quality control for each measurement method used by the applicant to assure the reliability and validity of radon and radon progeny measurements. This plan shall include provisions to monitor the accuracy and precision of measurements and can include the use of periodic calibrations of instruments, and blank, duplicate and spiked measurements.
- (6) Disclosure of all sample reporting forms mailed to clients, including any guidance provided concerning the need for further measurement or mitigation.
- (7) Disclosure of copies of current publications and advertisements of radon-related services made by the applicant.

- (8) Development, disclosure and adherence to a health and safety program to limit employees' exposure to radon progeny during the course of employment. Such a program shall include measures to keep each employee's exposure, which shall not exceed 4 working level months per year, as low as reasonably achievable. The certified radon measurement business shall maintain records showing the radiation exposures of all individuals for whom personnel monitoring is required. Such records shall be kept on form DH 1834. Working Level Month Explosure Form (11/15), incorporated by reference and which is available from the department at 4025 Esplanade Way, Room 205, Tallahassee. Florida, at http://radon.floridahealth.gov, http://www.flrules.org/Gateway/reference.asp?No=R ef-08112, or on clear and legible records containing all the information required by that form. Records shall be maintained in working level months showing the results of exposure during radon measurement activities and shall be preserved for 20 years. The discontinuance or curtailment of activities does not relieve the certified business of responsibility for retaining all radiation exposure records.
- (9) Maintenance of the following records for 5 years:
 - (a) Records of all radon tests performed;
- (b) Records of instrument calibrations and quality control;
- (c) Records of participation in a proficiency program;
- (d) Copies of certification for radon measurement specialists and radon measurement technicians employed or used as consultants:
- (e) Records of specialist site visits and observations and evaluations of technicians.
- (10) If a certified radon measurement business loses its certified radon measurement specialist, the certified radon measurement business shall notify the department in writing within 5 business days. The certified radon measurement business shall obtain another certified radon measurement specialist within 30 days of the loss of the certified radon measurement specialist.
- (11) Identification of all branch office locations and the certified specialists and technicians at branch locations who will perform measurements for the certified business. Branch offices shall identify the name and the certification number of the certified business on correspondence and reports to clients and shall accept payments in the name of the certified business. The branch office shall be considered a part of the certified business and make reports and follow procedures approved for the certified business.
- (12) A certified radon measurement business shall provide the following client reports:
- (a) The certified radon measurement business shall report measurement results for radon

and radon progeny to the client. Radon results shall be reported in picocuries per liter. Radon progeny results shall be reported in working levels. The report provided to the client shall include the name of the certified business, the business certification number, the name and certification number of the individual who performed the measurements, the type of device used, the date and time of the start and end of the measurement, and the following statements: This notice is provided to you by an organization or individual certified by the Florida Department of Health to perform radon or radon progeny measurements or radon mitigation services. Any questions, comments, or complaints regarding the persons performing these measurement or mitigation services may be directed to the Florida Department of Health, Bureau of Environmental Health, Radon and Indoor Air Program, 4052 Bald Cypress Way, Bin #A12, Tallahassee, Florida 32399-1720, 1(800)543-8279.

(b) In addition, the certified radon measurement specialist or business shall notify the client by telephone and certified mail within 2 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 radon information line at 1(800)543-8279 or at other telephone numbers provided by the department. The results of this measurement shall also be provided to the department by phone and certified mail within the same 2 business day period.

Rulemaking Authority 404.051, 404.056, 404.071 FS. Law Implemented 404.051, 404.056, 404.071 FS. History–New 1-3-89, Amended 10-24-90, 1-18-94, 12-9-96, Formerly 10D-91.1309, Amended 3-16-09, 4-13-17.

64E-5.1207 Certification Requirements for Radon Mitigation Businesses.

The following qualifications are required for certification as a radon mitigation business:

(1) Submission of an application on form DH 1749, Application for Certification as a Radon Business (11/15) (incorporated in Rule 64E-5.1206, F.A.C.), and a nonrefundable application and certification fee from the following schedule:

Application request received on or before June 30, 2016: \$450.00

Application request received on or after July 1, 2016: \$525.00

- (2) Identification of all mitigation materials and systems offered, diagnostic tests performed, and other related services offered.
- (3) Identification of the certified radon mitigation specialists and certified radon mitigation technicians to be used by the business.
- (4) If a certified radon mitigation business loses its certified radon mitigation specialist, the certified radon mitigation business shall notify the

department in writing within 5 business days. The certified radon mitigation business shall obtain another certified radon mitigation specialist within 30 days of the loss.

- (5) Identification of procedures and instrumentation used to perform diagnostic tests.
- (6) Disclosure of all reporting forms and system operating instructions provided to clients.
- (7) Disclosure of copies of current publications and advertisements of radon-related services made by the applicant.
- (8) Development, disclosure and adherence to a health and safety program to limit employees' exposure to radon progeny during the course of their employment. Such a program shall include measures to keep each employee's exposure, which shall not exceed 4 working level months per year, as low as reasonably achievable. The certified radon mitigation business shall maintain records showing the radiation exposures of all individuals for whom personnel monitoring is required. Such records shall be kept on form DH 1834, Working Level Month Exposure Form (11/15) (incorporated in Rule 64E-5.1206, F.A.C.), or on clear and legible records containing all the information required by that form. Records shall be maintained in working level months showing the results of exposure during radon mitigation activities and shall be preserved for 20 years. The discontinuance or curtailment of activities does not relieve the certified business of responsibility for retaining all radiation exposure records.
- (9) The certified radon mitigation business shall maintain on staff or retain as a consultant a certified radon mitigation specialist. The certified radon mitigation specialist shall monitor the applicant's mitigation activities, ensure compliance with state and federal regulations and be responsible for evaluating diagnostic tests in a building and designing mitigation systems. The certified radon mitigation specialist shall be present when requested by the department during scheduled visits by the department and shall physically observe and evaluate each certified radon mitigation technician in the performance of his mitigation duties at least once each calendar quarter to insure adequate supervision. A record of this evaluation shall be signed by the specialist and maintained on file by the business. If the mitigation reports submitted to meet the requirements of paragraph 64E-5.1203(4)(d), F.A.C., show that no diagnostics or mitigation installations performed during an entire calendar quarter by any of the certified radon mitigation technicians working for a certified radon mitigation business, the visit, observations and evaluations by the specialist are not required for that quarter. The quarterly visit, observations and evaluations by the specialist must be resumed within the same quarter in which diagnostic or mitigation activities are resumed. The

interval between visits, observations and evaluations by the specialist shall not exceed 1 year.

- (10) The certified radon mitigation business shall assure that radon mitigation system installations are performed under the direct supervision of a certified radon mitigation specialist or certified radon mitigation technician. A certified radon mitigation business may contract with a noncertified business to perform mitigation installation provided that work performed by non-certified persons is under the direct supervision of a certified radon mitigation specialist or certified radon mitigation technician.
- (11) The certified mitigation business shall install radon mitigation systems as specified in the Florida Building Code 5th Edition (2014) Residential, Appendix E, "Florida Standard for Mitigation of Radon in Existing Buildings" (effective June 1, 1994), or Florida Building Code 5th Edition (2014) Building, Appendix C, "Florida Standard for Mitigation of Radon in Existing Buildings" (effective June 1, 1994), which are incorporated by reference. As both appendices have been deemed copyright protected, they are available for inspection at the Department of Health, 4052 Bald Cypress Way, Bin #A-12, Tallahassee, Florida 32399-1720, or at the Department of State, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250.
- (12) The certified radon mitigation business shall ensure that each building is measured for radon levels before and after mitigation work is performed. Such measurements shall be of sufficient type, duration and consistency to allow for comparison of before and after mitigation radon levels, shall be performed with devices and methods as specified in subsection 64E-5.1206(2), F.A.C., and shall be performed by a certified measurement business. The post-mitigation measurements shall be started no sooner than 24 hours after the mitigation system is fully operational. The mitigation system shall be operated normally and continuously during the entire measurement period. The results of both the pre-mitigation and the post-mitigation measurements shall be sent to the department as specified in paragraph 64E-5.1203(4)(d), F.A.C.
- (13) The certified radon mitigation business shall maintain at a minimum the following records for 5 years:
- (a) Records of all mitigation work performed, including client name, address, initial and follow-up measurement results, diagnostic test results, a description of each mitigation system and materials installed, cost of each system, post-mitigation measurement methods and results and all pertinent dates.
- (b) Records of mitigation plans developed and signed by a certified radon mitigation specialist.
- (c) Records of all instrument calibrations and warrantied equipment installed.
 - (d) Copies of the certification for radon

- mitigation specialists and radon mitigation technicians employed or used as consultants.
- (e) Records of specialist site visits and observations and evaluations of technicians.
- (14) The certified radon mitigation specialist or certified radon mitigation technician shall perform a visual inspection and diagnostic tests as appropriate before system installation to determine the appropriate mitigation system to be installed. Observations made during visual inspections shall be documented by the business.
- (15) The certified radon mitigation business shall provide the client with the following written information:
- (a) Instructions on the operation and maintenance of each component of the mitigation system.
- (b) The proper functioning of mitigation equipment.
- (c) Information on adverse effects produced by the operation of a mitigation system, including added energy costs.
- (d) All warranty or guarantee information on the reduction of the radon level, on the mitigation system and on any separately warranteed or guaranteed system components.
- (e) The following statements: "This notice is provided to you by an organization or individual certified by the Florida Department of Health to perform radon or radon progeny measurements or radon mitigation services. Any questions, comments or complaints regarding the persons performing these measurement or mitigation services may be directed to the Florida Department of Health, Bureau of Environmental Health, Radon and Indoor Air Program, 4052 Bald Cypress Way, Bin #A12, Tallahassee, Florida 32399-1720. 1(800)543-8279."
- (16) Identification of all branch office locations and the certified specialists and technicians at branch locations who will perform mitigation services for the certified business. Branch offices shall identify the name of the certified business on correspondence and reports to clients and shall accept payments in the name of the certified business. The branch office shall be considered a part of the certified business and make reports and follow procedures approved for the certified business.

Rulemaking Authority 404.051, 404.056, 404.071 FS. Law Implemented 404.051, 404.056, 404.071 FS. History–New 1-3-89, Amended 10-24-90, 1-18-94, 12-9-96, Formerly 10D-91.1310, Amended 3-16-09, 4-13-17.

PART XII B MANDATORY RADON MEASUREMENTS

64E-5.1208 Measurement Requirements and Procedures.

- (1) The following buildings are required to be measured for radon or radon progeny.
- (a) All public and private school buildings or school sites housing students in kindergarten through grade 12.
- (b) All state-owned, state-operated, state-regulated or state-licensed 24-hour care facilities. This shall include but not be limited to the following: hospitals, nursing homes, foster homes, assisted living facilities, mental institutions, nursery facilities providing 24-hour care, detention centers, correctional institutions, and pre-release centers.
- (c) All state-licensed day care centers for children or minors.
- (2) The radon measurement procedures for use in fulfillment of the requirements of Section 404.056, F.S., Mandatory Radon Measurement Protocols, Brochure DH\PI 150-334 (11/15), is incorporated by reference and may be obtained from the department at 4025 Esplanade Way, Room 205, Tallahassee, Florida, http://radon.floridahealth.gov, and

http://www.flrules.org/Gateway/reference.asp?No=R ef-08113. This measurement protocol will be used to identify structures in which the potential exists for elevated radon concentrations, to specify longer term measurements to establish occupant exposure levels when elevated concentrations are found, and to periodically remeasure facilities.

(3) Measurement reports for dwelling units which have been measured using section 2 of the USEPA Radon and Radon Decay Product Measurements in Homes, Publication No. EPA 402-R-92-003, shall be reported to the department on form 1778, Mandatory Measurements Residential Radon Measurement Report (11/15) and also, if needed. form DH1777/DH1778 Supplement. Mandatory Radon Measurement Report Supplemental Page (Use if needed with DH1777 or DH1778) (2/13), incorporated by reference and available from the department at 4025 Esplanade Room 205, Tallahassee, Florida, http://radon.floridahealth.gov, and http://www.flrules.org/Gateway/reference.asp?No=R ef-08114, http://www.flrules.org/Gateway/reference.asp?No=R ef-08115, respectively. Measurements reports for non-residential buildings which have been measured using sections 3 and 4 of the Mandatory Radon Measurement Protocols (Brochure DH\PI 150-334, 11/15), incorporated by reference in subsection 64E-5.1208(2), F.A.C., shall be reported to the department on form 1777, Mandatory Measurements Nonresidential Radon Measurement Report (11/15), incorporated by reference and available from the department at 4025 Esplanade Way, Room 205. Tallahassee. Florida. http://radon.floridahealth.gov, and http://www.flrules.org/Gateway/reference.asp?No=R

ef-08116, and also, if needed, form DH 1777/1778 Supplement.

Rulemaking Authority 404.051, 404.056 FS. Law Implemented 404.022, 404.051(1), (4), (7), 404.056(1), (5), (7), (9) FS. History—New 10-8-89, Amended 1-18-94, 12-9-96, Formerly 10D-91.1317, Amended 4-13-17.