Rhode Island Department of Health

PUBLIC NOTICE

The Director of the Rhode Island Department of Health has determined to amend the rules and regulations listed below to remove the specific dollar value of all fees for licensing, laboratory and administrative services provided by the Department of Health from the individual regulations and reference all such fees to a new consolidated fee regulation (to be promulgated separately). These amendments are proposed pursuant to the authority contained in Public Law 2012-241, enacted by the General Assembly on 15 June 2012, and the relevant sections of the respective professional practice and licensure acts.

The following seventy-five (75) regulations are proposed to be amended:

1. Food Code
2. Rules and Regulations Establishing Educational and Experience Requirements for Registration as a Sanitarian
3. Rules and Regulations for Asbestos Control
4. Rules and Regulations for Bottled Water
5. Rules and Regulations for Certifying Analytical Laboratories
6. Rules and Regulations for Determination of Need for New Health Care Equipment and New Institutional Health Services
7. Rules and Regulations for Lead Poisoning Prevention
8. Rules and Regulations for Licensing Assisted Living Residences
9. Rules and Regulations for Licensing Athletic Trainers
10. Rules and Regulations for Licensing Birth Centers
11. Rules and Regulations for Licensing Chemical Dependency Professionals
12. Rules and Regulations for Licensing Clinical Laboratories and Stations
13. Rules and Regulations for Licensing Clinical Social Workers and Independent Clinical Social Workers
14. Rules and Regulations for Licensing Doctors of Acupuncture and Acupuncture Assistants
15. Rules and Regulations for Licensing Home Nursing Care Providers and Home Care Providers
16. Rules and Regulations for Licensing Hospice Care
17. Rules and Regulations for Licensing Interpreters for the Deaf
18. Rules and Regulations for Licensing Kidney Disease Treatment Centers
19. Rules and Regulations for Licensing Massage Therapists
20. Rules and Regulations for Licensing Mental Health Counselors and Marriage and Family Therapists
21. Rules and Regulations for Licensing Occupational Therapists and Occupational Therapy Assistants
22. Rules and Regulations for Licensing of Hospitals
23. Rules and Regulations for Licensing of Midwives
24. Rules and Regulations for Licensing of Nursing Facilities
25. Rules and Regulations for Licensing of Nursing Home Administrators
26. Rules and Regulations for Licensing Physical Therapists and Physical Therapist Assistants
27. Rules and Regulations for Licensing Psychologists
28. Rules and Regulations for Licensing Rehabilitation Hospital Centers

29. Rules and Regulations for Licensing Respiratory Care Practitioners
30. Rules and Regulations for Licensing Speech Pathologists and Audiologists
31. Rules and Regulations for Licensing Swimming and Wading Pools, Hot Tubs, and Spas
32. Rules and Regulations for Licensure and Discipline of Chiropractic Physicians
33. Rules and Regulations for Limited Medical Registration
34. Rules and Regulations for Radon Control
35. Rules and Regulations for the Certification of Administrators of Assisted Living Residences
36. Rules and Regulations for the Certification of Health Plans
37. Rules and Regulations for the Control of Radiation
38. Rules and Regulations for the Licensing of Freestanding Ambulatory Surgical Centers
39. Rules and Regulations for the Licensing of Freestanding Emergency Care Facilities
40. Rules and Regulations for the Licensing of Nurses and Standards for the Approval of Basic Nursing Education Programs
41. Rules and Regulations for the Licensing of Nursing Service Agencies
42. Rules and Regulations for the Licensing of Organized Ambulatory Care Facilities
43. Rules and Regulations for the Licensing of Podiatrists
44. Rules and Regulations for the Licensing of Radiographers, Nuclear Medicine Technologists, Radiation Therapists and Radiologist Assistants
45. Rules and Regulations for the Licensure and Discipline of Physicians
46. Rules and Regulations for the Licensure of Barbers, Hairdressers/Cosmeticians, Manicurists, Estheticians, and Instructors
47. Rules and Regulations for the Licensure of Clinical Laboratory Science Practitioners
48. Rules and Regulations for the Licensure of Physician Ambulatory Surgery Centers and Podiatry Ambulatory Surgery Centers
49. Rules and Regulations for the Licensure of Physician Assistants
50. Rules and Regulations for the Licensure of Veterinarians
51. Rules and Regulations for the Registration of Body Piercing Technicians and Body Piercing Establishments
52. Rules and Regulations for the Registration of Distributors of Controlled Substances in Rhode Island
53. Rules and Regulations for the Registration of Tanning Facilities
54. Rules and Regulations for the Registration of Tattoo Artists and Tattoo Parlors
55. Rules and Regulations for the Utilization Review of Health Care Services
56. Rules and Regulations Governing Vital Statistics
57. Rules and Regulations Pertaining to Certification of Managers in Food Safety
58. Rules and Regulations Pertaining to Dentists, Dental Hygienists, and Dental Assistants
59. Rules and Regulations Pertaining to Embalmers, Funeral Directors, and Funeral Service Establishments
60. Rules and Regulations Pertaining to Opticians
61. Rules and Regulations Pertaining to Optometrists
62. Rules and Regulations Pertaining to Permits for Screening Programs
63. Rules and Regulations Pertaining to Pharmacists, Pharmacies and Manufacturers, Wholesalers, and Distributors
64. Rules and Regulations Pertaining to Public Drinking Water
65. Rules and Regulations Pertaining to Rhode Island Certificates of Registration for Nursing Assistants, Medication Aides, and the Approval of Nursing Assistant and Medication Aide Training Programs
66. Rules and Regulations Pertaining to the Certification of Public Drinking Water Supply Treatment and Public Water Supply Transmission and Distribution Operators

67. Rules and Regulations Pertaining to the Licensing of Dietitians/Nutritionists
68. Rules and Regulations Pertaining to the Medical Examiner System
69. Rules and Regulations Pertaining to the Newborn Metabolic, Endocrine, and Hemoglobinopathy Screening Program and the Newborn Hearing Loss Screening Program
70. Rules and Regulations Pertaining to the Processing and Distribution of Shellfish
71. Rules and Regulations Prescribing Minimum Standards for Processing, Storage and Transportation of Fish and Fishery Products
72. Rules and Regulations Related to the Licensure of Hearing Aid Dealers and Fitters
73. Rules and Regulations Related to the Medical Marijuana Program
74. Rules and Regulations Related to the Practice of Electrolysis
75. Rules and Regulations Relating to Emergency Medical Services

---

Notice is hereby given in accordance with the provisions of §42-35-3(a)(2) of the Rhode Island General Laws, as amended, that the Director is affording all interested persons the opportunity to submit data, views, or arguments in writing on this matter. Opportunity for public hearing shall be granted if requested by twenty-five (25) persons, by a government subdivision or agency, or by an association having not less than twenty-five (25) members. *Otherwise, no hearing shall be convened*. Should a hearing be requested by twenty-five (25) persons, by a government subdivision or agency, or by an association having not less than twenty-five (25) members, *a hearing shall be scheduled only for the regulation(s) for which the request for hearing was received*. All regulations for which a public hearing is not requested will be filed with the Rhode Island Secretary of State pursuant to Chapter 42-35 of the Rhode Island General Laws, as amended, shortly after the 10 September 2012 deadline (as below).

Such input or requests for public hearing must be received in writing **no later than Monday, 10 September 2012**. Such input or requests should be addressed to: Michael Fine, M.D., Director, Rhode Island Department of Health, Three Capitol Hill, Room #401, Providence, Rhode Island 02908-5097.

In the development of these amendments, consideration was given to the following: (1) alternative approaches; and (2) overlap or duplication with other statutory and regulatory provisions. No alternative approach, duplication, or overlap was identified based upon available information.

Copies of all regulations are available for public inspection in the Cannon Building, Room #201, Rhode Island Department of Health, Three Capitol Hill, Providence, Rhode Island 02908-5097, on the Secretary of State's website: http://www.sos.ri.gov/rules/, by calling 401-222-7767, or by e-mail to Bill.Dundulis@health.ri.gov.

Signed this 3rd day of August 2012

Original signed by Michael Fine, MD

Michael Fine, M.D., Director of Health

RULES AND REGULATIONS FOR

RADON CONTROL

[R23-61-RC]

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF HEALTH

AUGUST 1994

AS AMENDED

January 2002 (re-filing in accordance with the provisions of section 42-35-4.1 of the Rhode Island General Laws, as amended)

January 2007 (re-filing in accordance with the provisions of section 42-35-4.1 of the Rhode Island General Laws, as amended)

June 2007

January 2012 (re-filing in accordance with the provisions of section 42-35-4.1 of the Rhode Island General Laws, as amended)

August 2012 (Proposed)

Compiler's Notes:
Proposed Additions: Underlined
Proposed Deletions: ~~Strikeouts~~

INTRODUCTION

These amendments to *Rules and Regulations For Radon Control* [*R23-61-RC*] are promulgated pursuant to the authority conferred under Chapter 23-61 of the General Laws of Rhode Island, as amended, and are established for the purpose of protection of human health and prevention of exposure to elevated concentrations of radon.

In accordance with the provisions of section 42-35-3(c) of the General Laws of Rhode Island, as amended, in the development of the regulations, consideration was given to: (1) alternative approaches to the regulations; and (2) duplication or overlap with other state regulations. Based on the available information, no known alternative approach, duplication or overlap was identified.

These amended rules and regulations supersede all previous *Rules and Regulations for Radon Control*, promulgated by the Rhode Island Department of Health and filed with the Secretary of State.

TABLE OF CONTENTS

TITLE		PAGE
PART A - DEFINITIONS, GENERAL PROVISIONS, AND RADON STANDARD		
A.1	Definitions	A-1
A.2	General Provisions	A-3
	Purpose and Scope	A-3
	Variance Procedures	A-3
	Rules Governing Practices and Procedures	A-3
A.3	Radon Standards	A-3
	Air Standard	A-3
	Water Standard	A-3
PART B - LICENSING AND CERTIFICATION		
B.1	General Provisions	B-1
	Application Requirements	B-1
	Application Exemptions	B-1
	Approval of Application	.B-2
	Denial of Applications	B-2
	Renewal of License and/or Certification	B-2
	Suspension or Revocation of License or Certification	B-3
	Reporting Requirements	B-3
B.2	Licensing of Radon Mitigation Contractors	B-4
	Licensing Requirements	B-4
	Performance Requirements	B-4
	Recordkeeping	B-5
	Notifications	B-5
	Employee Safety and Health	B-5
B.3	Certification of Radon Measurement Businesses	B-6
	Certification Requirements	B-6
	Performance Requirements	B-6
	Recordkeeping	B-6
B.4	Licensing of Radon Mitigation Specialists	B-7
	Licensing and Training Requirements	B-7
	Performance Requirements	B-7
B.5	Certification of Radon Measurement Consultants	B-8
	Certification and Training Requirements	B-8
	Performance Requirements	B-8
B.6	Licensing of Radon Mitigation Workers	B-9
	Licensing and Training Requirements	B-9

TITLE		PAGE

	Performance Requirements	B-9
B.7	Certification of Radon Analytical Services	B-9
	Certification Requirements	B-9
	Performance Requirements	B-10
B.8	Certification of Radon Training Courses	B-10
	Certification Requirements	B-10
	Performance Requirements	B-11
	Recordkeeping	B-11
	Notifications	B-12
Part C - MEASUREMENT PROTOCOLS FOR PUBLIC AND HIGH PRIORITY BUILDINGS		
C.1	Measurement Protocols for Radon in Air	C-1
	Purpose and Scope	C-1
	Buildings Requiring Radon Testing	C-1
	Acceptable Radon Measurement Methods	C-1
	Placement of Measurement Devices	C-1
	General Measurement Requirements	C-2
	Short Term Testing Requirements	C-2
	Follow-up Testing Requirements	C-2
C.2	Measurement Protocols for Radon in Water	C-3
	Water Protocols	C-3
PART D - MITIGATION PROTOCOLS FOR PUBLIC AND HIGH PRIORITY BUILDINGS		
D.1	Mitigation Protocols for Radon in Air	D-1
	Purpose and Scope	D-1
	Mitigation System Requirements	D-1
	Back-Drafting	D-1
D.2	Mitigation Protocols for Radon in Water	D-1
	Mitigation Protocols	D-1
PART E - OWNERS RESPONSIBILITIES FOR PUBLIC AND HIGH PRIORITY BUILDINGS		
E.1	Radon Measurement Responsibilities	E-1
	Buildings Requiring Radon Testing	E-1
	Testing of Buildings	E-1
	Retesting of Buildings	E-1
	Recordkeeping Requirements	E-1
E.2	Radon Mitigation Responsibilities	E-2
	Mitigation Requirements	E-2
	Post Mitigation Requirements	E-2

RULES AND REGULATIONS FOR RADON CONTROL

CHAPTER 23-61

PART A

DEFINITIONS, GENERAL PROVISIONS, AND RADON STANDARDS

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF HEALTH

PART A

DEFINITIONS, GENERAL PROVISIONS, AND RADON STANDARDS

A.1 DEFINITIONS

Whenever used in these rules and regulations, the following terms shall be construed as follows:

Act - Title 23, Chapter 61 of the General Laws of the State of Rhode Island entitled Radon Control.

Agency - The Rhode Island Department of Health, Office of Occupational and Radiological Health.

Alpha Track Detector - A passive radon measurement device which performs time-integrated measurement.

Back-Drafting - A condition where normal upward movement of combustion products is reversed.

Charcoal Adsorption Device - One of several variously configured containers filled with a measured amount of activated charcoal and used to measure radon.

Child Care Facility - A facility which accommodates five (5) or more children of any age who are not related and is licensed by the Department of Children, Youths, & Families or the Department of Education.

Continuous Radon Monitor - An active radon detection device which uses an electronic detector to accumulate and store information related to the periodic measurement of average radon concentration.

Department - The Rhode Island Department of Health (RIDOH).

Diagnostic Tests - Tests performed or procedures used to determine appropriate radon mitigation methods.

Director - The director of the Rhode Island Department of Health.

Electret Ion Chamber - A passive measurement device consisting of a canister containing a charged electret.

EPA - The United States Environmental Protection Agency.

Follow-up Testing - A test in which the radon measurement device is exposed for a minimum of ten (10) days but not longer than one year.

High Priority Building - Any public building or public, private, and/or parochial school (Grades pre-K to 12), and/or child care facility.

HVAC - Heating, ventilation and air conditioning system.

OSHA -The Occupational Safety and Health Administration of the United States Department of Labor.

A.1

Owner - The person having legal title to property and/or buildings. For purposes of publicly owned property only, the owner shall be defined as the chief executive officer of the state or municipal agency which owns, leases or controls the use of the property.

Person - Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this state, and other state or political subdivision or agency thereof, and any legal successor, representative, agent or agency of the foregoing.

Picocurie Per Liter (pCi/L) - A unit of measurement of the concentration of radioactivity in a gas which equals 2.22 disintegrations per minute of radioactive material per liter. One picocurie is equivalent to 10 to the minus 12 (10^{-12}) of a curie.

Public Building - Any building owned, managed, leased, furnished, or occupied by a state or municipal agency or commission, or public school.

Radon - The radioactive noble gas radon 222.

Radon Analytical Service - Any person engaged in the reading or analysis of radon measurement devices.

Radon Measurement Business - Any person engaged in radon measurement for a fee, whose employees test for radon or radon progeny.

Radon Measurement Consultant - An individual who performs radon or radon progeny measurements, provides professional advice on such measurements, health risks, radon related exposure, radon entry routes, and other radon related consulting activities.

Radon Mitigation Contractor - A person who engages in radon mitigation as a business, whose employees install systems to mitigate radon or radon progeny contamination.

Radon Mitigation Specialist - An individual who evaluates diagnostic tests to determine appropriate radon or radon progeny mitigation strategies, designs and supervises the installation of mitigation systems. This individual will be named on the radon mitigation contractor's license.

Radon Mitigation Worker - An individual who helps install radon or radon progeny mitigation systems.

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

Radon/Radon Progeny Mitigation - Any actions or measures taken and any materials or equipment installed to reduce levels of radon gas and/or radon progeny in the air or water supply of a building, or to prevent entry of radon or radon progeny into the indoor atmosphere.

Radon Training Course - Any course that provides instruction in radon measurement or mitigation techniques.

RCP - The EPA National Radon Contractor Proficiency Program.

RMP - The EPA National Radon Measurement Proficiency Program.

A.1

Short Term Testing - A test in which a device is exposed for a minimum of forty-eight (48) hours in closed conditions up to a maximum of ninety (90) days.

Working Level (WL) - A measure of radon progeny concentration in air. Working level means the concentration of short lived radon progeny that will result in 130,000 million electron volts (1.3×10^5 MeV) of potential alpha particle energy per liter of air.

A.2 GENERAL PROVISIONS

A.2.1 **Purpose and Scope.** These regulations provide for the licensing and/or certification of the persons who engage in radon activities and those requirements related to the safe mitigation of radon and radon progeny hazards.

A.2.2 **Variance Procedures.**

(a) The licensing Agency may grant a variance either upon its own motion or upon the request of the applicant from the provisions of any rule or regulation herein, if it finds in specific cases, that a literal enforcement of such provisions will result in unnecessary hardship to the applicant. A variance shall not be granted if it is contrary to the public interest and/or health and safety of the public. The provisions of this section shall not be applicable to the requirements of Part B of these regulations pertaining to licensing and certification.

(b) A request for a variance shall be filed by the applicant in writing, setting forth in detail the basis upon which the request is made. Within thirty (30) days after filing, the Agency shall notify the applicant as to whether the request has been approved or denied. In the case of a denial, a hearing date, time and place may be scheduled if the applicant appeals the denial.

A.2.3 **Rules Governing Practices and Procedures.** All hearings and reviews required under the provisions of Chapter 23-61 of the General Laws of Rhode Island as amended, shall be held in accordance with the provisions of the rules and regulations promulgated by the Rhode Island Department of Health entitled, "Rules and Regulations Governing the Practices and Procedures Before the Rhode Island Department of Health (R42-35-PP)".

A.3 RADON STANDARDS

A.3.1 **Air Standard.** The indoor air standard for naturally occurring radon gas or radon progeny in buildings covered by these regulations shall be less than 4 pCi/L (0.02 WL) as an annual average.

A.3.2 **Water Standard.** The radon in water standard will be adopted into these regulations once the standard is promulgated by EPA.

RULES AND REGULATIONS FOR RADON CONTROL

CHAPTER 23-61

PART B

LICENSING AND CERTIFICATION

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF HEALTH

PART B

LICENSING AND CERTIFICATION

B.1 GENERAL PROVISIONS

B.1.1 **Application Requirements.**

(a) Beginning October 1, 1994, no person may measure or analyze for radon or conduct associated radon mitigation activities in Rhode Island unless such person has been licensed and/or certified as provided by these regulations. These regulations in no way exempt any person from other state and local occupational licensure and/or certification requirements.

(b) An applicant seeking licensing and/or certification for radon testing or mitigation services within the state of Rhode Island shall:

(1) Complete the appropriate application form, available from the Agency and identified below.

(2) Submit the application, supporting credentials, and the appropriate licensing and/or certification fee, identified ~~below,~~ in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health* to the Department of Health, Office of Occupational & Radiological Health, 3 Capitol Hill Room 206, Providence, RI 02908-5097. ~~The fee is the same for initial application and renewal.~~ Analytical services and training courses include an additional assessment based on the amount of services or courses offered.

APPLICANT	**FORM**	~~**FEE**~~
Radon Mitigation Contractor	#RA-2	~~$200~~
Radon Measurement Business	#RA-3	~~$200~~
Radon Mitigation Specialist	#RA-4	~~$130~~
Radon Measurement Consultant	#RA-5	~~$130~~
Radon Mitigation Worker	#RA-6	~~$30~~
Radon Analytical Services	#RA-7	~~$300 + $100 for each. additional Service~~
Radon Training Courses	#RA-8	~~$300 + $100 for each. additional Course~~

B.1.2 **Application Exemptions.** The license and/or certification requirements of this part shall not apply to:

(a) Those individuals testing or mitigating a private residence owned or leased by the individual who is performing the testing or mitigation.

(b) Any individual testing their own living area.

B.1.2(c)

(c) Those persons who sell or offer radon measurement devices, such as charcoal canisters, for sale at a retail outlet and do not manage the testing process or perform radon mitigation services.

B.1.3 **Approval of Application.**

(a) The requested license and/or certification shall be approved when the applicant:

(1) Submits a complete and accurate application.

(2) Submits the required application fee, as identified in ~~section B.1.1.~~ the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

(3) Provides evidence of qualifications for the licensure and/or certification being sought.

(4) If licensed and/or certified in another state, produces evidence that his/her status is in good standing.

(b) The Agency may at any time after filing of the original application require further information to aid in making a determination.

(c) A license and/or certification shall be valid for up to one year following the date of issuance. No radon measurement or mitigation activity shall be conducted after expiration date of the license and/or certification.

(d) A replacement certificate, license, and/or picture identification (ID) may be obtained by submitting a written request and a ~~twenty dollar ($20)~~ fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health* to the Agency.

B.1.4 **Denial of Application.** The Agency may deny an application if requirements established by the Act and/or by these regulations have not been met. The applicant may request a hearing in accordance with the provisions of Chapter 42-35 of the General Laws of the State of Rhode Island.

B.1.5 **Renewal of License and/or Certification.**

(a) The renewal application must be completed on the appropriate form and submitted with the appropriate fee, as identified in ~~section B.1.1.~~ the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

(b) Renewal will be approved or denied in accordance with the provisions of sections B.1.3 and B.1.4, respectively.

(c) The current license or certification will remain valid for the period of time necessary for a final

determination on a renewal application that has been filed thirty (30) days or more before the expiration of the current license.

B.1.6

B.1.6 **Suspension or Revocation of License or Certification.** Pursuant to the provisions of Chapter 23-61 of the General Laws of Rhode Island the Department may suspend or revoke any license and/or certification for good cause. Good cause shall be deemed to include but not limited to:

(a) Performance of radon related activities for which s/he is not licensed and/or certified.

(b) Failure to carry on person a current picture ID, issued by the Agency, at all times while performing any radon-related function.

(c) Failure to report any changes in the information provided in the original or renewal application to the Agency, including changes in licensed and/or certified personnel, in writing and within ten (10) business days of the change.

(d) Failure to allow authorized representatives of the department to have access during normal business hours to facilities, offices, and files for inspection and examination of radon-related records and test procedures.

(e) Failure to allow authorized representatives of the Department to observe and inspect on-site radon related measurement or mitigation activities, with approval of the property owner, occupant, or other authorized person.

(f) Failure to conduct all radon-related activities in accordance with provisions of these regulations and other applicable municipal, county, state and federal regulations.

(g) Failure to comply in any way with the Act or these regulations.

B.1.7 **Reporting Requirements.**

(a) Radon and radon progeny test results for all public and high priority buildings shall be submitted to the Agency by a certified radon measurement business. The results from the previous quarter shall be submitted within thirty (30) days of the last day of each quarter on the appropriate reporting form, which is available from the Agency.

(b) Radon and radon progeny test results for testing other than public and high priority buildings shall be submitted to the Agency by a certified radon measurement business. The results from the previous quarter shall be submitted within thirty (30) days of the last day of each quarter on the appropriate reporting form, which is available from the Agency. The information and results on this form will only be used for the tracking of testing.

(c) The certified radon measurement business or the licensed radon mitigation contractor shall report radon and radon progeny test results to the client within thirty (30) days of receiving said results.

(d) Any client who is informed of the results of radon measurements must also be informed of the name and the certification number of the person who took the measurements and the certified radon analytical service that performed the analysis.

B.1.7(e)

(e) Radon test results shall be reported in picocuries per liter; radon progeny test results shall be reported in working levels.

(f) The report provided to the client shall include the following statement:

This notice is provided to you by an organization or individual licensed and/or certified by the Rhode Island Department of Health to perform radon or radon progeny measurements or radon mitigation services. Any questions, comments, or complaints regarding the person performing these measurements or mitigation services may be directed to the Rhode Island Department of Health, Office of Occupational and Radiological Health, 3 Capitol Hill Room 206, Providence, RI 02908-5097, (401) 277-2438.

(g) Results equal to or greater than 100 pCi/L (0.5 WL) shall be reported to the Agency and the client by phone within two (2) business days and by certified mail within five (5) business days. The client should also be advised to contact the Office of Occupational and Radiological Health at (401) 277-2438.

(h) A licensed radon mitigation contractor shall submit a report to the Agency on all mitigation work completed during the previous quarter. Reports shall be submitted within thirty (30) days of the last day of each quarter on the appropriate reporting form, which is available from the Agency.

B.2 LICENSING OF RADON MITIGATION CONTRACTORS

B.2.1 **Licensing Requirements.**

(a) Submit application form, supporting credentials, and the appropriate fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

.

(b) Identify the licensed radon mitigation specialist(s) to be utilized.

(c) Follow the general requirements for all applicants as listed in section B.1 of these regulations.

B.2.2 **Performance Requirements.** In addition to the general requirements for all applicants, as listed in section B.1, the radon mitigation contractor must:

(a) Maintain a licensed radon mitigation specialist on staff. In the event of the resignation or termination of said specialist, notify the Agency in writing within five (5) business days and refrain from engaging in any radon mitigation activities until another specialist is hired.

(b) Ensure that radon mitigation system installations are performed by a licensed radon mitigation specialist or licensed radon mitigation worker(s) under the direct supervision of the specialist.

(c) Subcontract only those portions of the mitigation project which involve the pouring of concrete

slabs, plumbing, and electrical work.

B.2.2(d)

(d) Provide to the client, in writing:

(1) All warranties regarding radon level reductions and proper functioning of mitigation equipment. The precise coverage shall be explicitly stated in the contract offered to the client, and all warranties offered must be honored.

(2) All instructions regarding the operation and maintenance of each component of the mitigation system.

(3) An estimate of approximate added energy costs.

(e) Ensure that all mitigation work complies with these regulations and local building codes.

B.2.3 **Recordkeeping.** The following records shall be maintained until the Department authorizes disposition and shall be made available to the Department upon request:

(a) All mitigation work performed, which shall include:

(1) Address of mitigation.

(2) Initial short term test results.

(3) Any follow-up test results.

(4) Diagnostic test results if taken.

(5) A description of each mitigation system.

(6) Post-mitigation measurements, if known, that include method of measurement.

(7) All pertinent dates.

(b) All instrument calibrations and warranted equipment installations.

(c) Copies of the licenses for all radon mitigation specialist(s) and radon mitigation worker(s) employed.

B.2.4 **Notification.**

(a) The Agency shall be in receipt of notification on the appropriate form at least one (1) business day in advance of beginning any mitigation project. The Agency shall be notified by phone on the date that the project begins.

(b) The Agency shall be notified in writing of any changes in the project.

B.2.5 **Employee Health and Safety.** To ensure the continued health and safety of all radon mitigation employees, the radon mitigation contractor shall:

(a) Develop and adhere to a health and safety program which:

B.2.5(a)(1)

(1) Complies with all OSHA standards pertinent to health and safety.

(2) Complies with the OSHA Ionizing Radiation standard (29 CFR 1910.96).

(b) Make this program available to all employees and to any federal, state or local regulatory agencies.

B.3 CERTIFICATION OF RADON MEASUREMENT BUSINESSES

B.3.1 **Certification Requirements.**

(a) Submit application form, supporting credentials, and the appropriate fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

.

(b) Identify the certified radon measurement consultant(s) to be utilized.

(c) Follow the general requirements for all applicants as listed in section B.1 of these regulations.

B.3.2 **Performance Requirements.** In addition to the general requirements for all applicants, as listed in section B.1, the owners of a radon measurement business must:

(a) Maintain the services of a certified radon measurement consultant. In the event of the resignation or termination of said consultant, the business must notify the Agency in writing within five (5) business days and refrain from engaging in any radon measurement activities until obtaining the services of another certified radon measurement consultant.

(b) Ensure that all radon and radon progeny testing, including the placement and retrieval of all measurement devices, is performed by certified radon measurement consultants.

(c) Develop and adhere to a quality assurance and quality control plan for each service and technique provided.

(d) Use only radon measurement methods and protocols that have been determined acceptable by the EPA's National Radon Measurement Proficiency Program and the RIDOH. The Agency must be notified in five (5) business days of any change in the type of device being used.

(e) Identify all analytical services to be used. These services must be listed by this agency as a radon analytical service for the measurement device(s) analyzed.

B.3.3 **Recordkeeping.** The following records shall be maintained until the Department authorizes disposition and shall be made available to the Department upon request:

(a) All measurements taken, which shall include:

(1) Address of measurement.

B.3.3(a)(2)

(2) Initial short term test results.

(3) Follow-up test results.

(4) Diagnostic test results.

(5) Post-mitigation measurements that include method of measurement.

(6) Name and certification number of person making the measurements.

(7) Name of the certified radon analytical service used.

(8) All pertinent dates.

(b) All instrument calibrations.

(c) Copies of the certifications for all radon measurement consultants employed.

B.4 LICENSING OF RADON MITIGATION SPECIALISTS

In addition to the general requirements for all applicants, as listed in section B.1, the applicant for the position of radon mitigation specialist must also fulfill the requirements listed in this section.

B.4.1 **Licensing and Training Requirements.**

(a) Submit application form, supporting credentials, and the appropriate fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

(b) Successfully complete a course that is approved by the EPA and this Agency.

(c) License renewal applications must also include documentation regarding successful completion of a required biennial review course that is approved by this Agency.

(d) Provide documentation of passing the EPA radon mitigation proficiency (RCP) examination.

B.4.2 **Performance Requirements.**

(a) A person who performs radon mitigation activities for which licensing is required shall either own or be employed by a licensed radon mitigation contractor prior to performing any radon mitigation services.

(b) Radon mitigation specialist services must be performed under the auspices of a licensed radon mitigation contractor. A specialist may be listed on more than one radon mitigation contractor's license and may also qualify as a licensed radon mitigation worker for other contractors.

(c) Maintain a listing in the EPA Radon Contractor Proficiency Program (RCP).

(d) A radon mitigation specialist shall notify the Agency of termination of services from a mitigation contractor within five (5) business days.

B.5 CERTIFICATION OF RADON MEASUREMENT CONSULTANTS

In addition to the general requirements for all applicants, as listed in section B.1, the applicant for the position of radon measurement consultant must also fulfill the requirements listed in this section.

B.5.1 **Certification and Training Requirements.**

(a) Submit application form, supporting credentials, and the appropriate fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

(b) Successfully complete a course that is approved by this Agency.

(c) Certification renewal applications must also include documentation regarding successful completion of a required biennial review course that is approved by this Agency.

(d) Provide documentation of passing the EPA radon measurement proficiency (RMP) examination.

B.5.2 **Performance Requirements.**

(a) A person who performs radon measurement activities for which certification is required shall either own or be employed by a certified radon measurement business prior to performing radon measurement services.

(b) Radon measurement consultant services must be performed under the auspices of a certified radon measurement business. A consultant may be listed with more than one radon measurement business.

(c) Maintain a listing in the EPA Radon Measurement Proficiency Program (RMP).

(d) The consultant for a radon measurement business shall:

(1) Perform measurements.

(2) Provide signed quarterly reports to the department.

(3) Notify clients of radon levels, in accordance with the provisions of section B.1.10.

(4) Assess quality assurance and quality control measures.

(5) Evaluate operating procedures and ensure compliance with state and federal regulations.

(e) A consultant shall notify the Agency of termination of services from a measurement business within five (5) business days.

B.6 LICENSING OF RADON MITIGATION WORKERS

In addition to the general requirements for all applicants, as listed in section B.1, the applicant for the position of radon mitigation worker must also fulfill the requirements as listed in this section.

B.6.1 **Licensing and Training Requirements.**

(a) Submit application form, supporting credentials, and the appropriate fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

(b) The applicant must successfully complete an Agency approved course for radon mitigation workers or other equivalent training (4 hours) given by a licensed mitigation specialist which must includes instruction on radon measurement, mitigation installation techniques, worker safety, and radon health effects.

B.6.2 **Performance Requirements.**

(a) Radon mitigation worker services must be performed under the on-site supervision of a licensed mitigation specialist.

(b) The applicant must also receive a biennial review of radon mitigation techniques and instruction on new technology and industry practices given by the licensed mitigation specialist.

B.7 CERTIFICATION OF RADON ANALYTICAL SERVICES

In addition to the general requirements for all applicants, as listed in section B.1, the applicant for a radon analytical service must also fulfill the requirements as listed in this section.

B.7.1 **Certification Requirements.**

(a) Submit application form, supporting credentials and the appropriate fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

(b) Provide documentation of successful completion of the EPA Radon Measurement Proficiency Program (RMP) for each primary measurement device for which certification is desired.

(c) Identify all personnel performing analysis or readings.

(d) Provide the agency with a copy of the quality assurance and quality control procedures for each radon measurement method established by the applicant.

(e) Provide evidence of licensure as an analytical laboratory by the RIDOH in accordance with section 23-16.2 of the General Laws of Rhode Island entitled "Laboratories" for the following methods:

B.7.1(e)(1)

(1) Alpha Track Detectors

(2) Charcoal Adsorption Devices

(3) Charcoal Liquid Scintillation Devices

B.7.2 **Performance Requirements.**

(a) Maintain a listing in the EPA Radon Measurement Proficiency Program (RMP) for each primary measurement device for which certification is requested.

(b) Analytical services certified in accordance with these regulations must comply with any other applicable state and local licensing and/or certification requirements.

B.8 CERTIFICATION OF RADON TRAINING COURSES

In addition to the general requirements for all applicants, as listed in section B.1, the applicant for a radon training course must also fulfill the requirements as listed in this section.

B.8.1 **Certification Requirements.**

(a) Submit application form, supporting credentials, and the appropriate fee as set forth in the *Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.*

(b) The application for a radon training course must be submitted to the agency for review at least forty-five (45) days before the course is scheduled to begin.

(c) The applicant shall also submit copies of the course curriculum, training materials, and qualifications of the proposed instructors.

(d) Obtain certification for each of the following courses you plan to offer:

(1) Initial Radon Mitigation Specialist - 32 hours

(2) Initial Radon Measurement Consultant - 16 hours

(3) Initial Radon Mitigation Worker - 4 hours

(4) Radon Mitigation Specialist Biennial Review - 8 hours

(5) Radon Measurement Consultant Biennial Review - 8 hours

(e) Radon mitigation contractor courses must be EPA and Agency approved. All other courses must be approved by this Agency and meet the requirements these regulations.

(f) This Agency shall utilize EPA guidelines to evaluate the training course.

(g) Certification will be valid for one (1) year following the date of issuance. Approval for course material shall be granted for a period of two (2) years unless the requirements for course approval are not met.

B.8.2

B.8.2 **Performance Requirements.** The course provider shall:

(a) Update the subject matter as necessary to conform with currently accepted techniques and protocols.

(b) Any proposed changes in course materials or instructors shall be reported in writing to the Agency at least fifteen (15) business days and must be approved prior to implementation of the change(s).

(c) Allow authorized representatives of the Agency to observe and evaluate training sessions, instructors, and course materials.

(e) Provide the course participants with an opportunity to evaluate, in writing, all aspects of the course including:

(1) Instructor;

(2) Teaching methods;

(3) Course content;

(4) Facilities.

(f) Results of this evaluation shall be available for Agency inspection for five (5) years after course completion.

(g) Provide each participant with a written verification of successful course completion which shall include:

(1) Name of participant;

(2) Title and date of course;

(3) Name, address, and phone number of course provider.

(4) Name and signature(s) of course instructor(s)

B.8.3 **Recordkeeping.**

(a) Maintain attendance records.

(b) Maintain documentation of each certified course given and shall include as a minimum:

(1) The type of course;

(2) The date(s) and location(s) of course;

(3) The class roster.

(c) Retain all records for a minimum of five (5) years.

B.8.4

B.8.4 **Notifications.**

(a) Submit the date(s) and locations of all training courses to be received by the agency in writing at least five (5) business days in prior to start of course.

(b) Submit a roster of course participants to the Agency on form RA-13 within thirty (30) days after course completion.

RULES AND REGULATIONS FOR RADON CONTROL

CHAPTER 23-61

PART C

MEASUREMENT PROTOCOLS FOR PUBLIC AND HIGH PRIORITY BUILDINGS

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF HEALTH

PART C

MEASUREMENT PROTOCOLS FOR PUBLIC AND HIGH PRIORITY BUILDINGS

C.1 MEASUREMENT PROTOCOLS FOR RADON IN AIR

C.1.1 **Purpose and Scope.** Measurement protocols for radon in air are designed:

(a) To identify structures in which the potential exists for elevated radon concentrations; and

(b) When elevated concentrations are found, to specify longer term measurements to determine the level of occupant exposure.

C.1.2 **Buildings Requiring Radon Testing.** The following public and high priority buildings must be tested for radon or radon progeny using the procedures and protocols contained in this section:

(a) Any building owned, managed, leased, furnished or occupied by a state or municipal agency, commission, or public school.

(b) All public, private, and parochial school buildings or school sites housing students in kindergarten through grade twelve.

(c) Child care facilities.

C.1.3 **Acceptable Radon Measurement Methods.** Only those measurement methods (devices) which have been determined acceptable by the EPA under the National Radon Measurement Proficiency Program and the RIDOH shall be acceptable for compliance with these regulations.

C.1.4 **Placement of Measurement Devices.**

(a) Measurement device locations are to be determined after an analysis of the building.

(b) The location of all short and follow-up measurements shall be noted on a floor plan of the building.

(c) Each habitable room on ground level and below, with the exception of rest rooms, closets, or shower areas, shall be tested.

(d) In rooms greater than two thousand (2,000) square feet at least one (1) measurement shall be taken for each two thousand (2,000) square feet, or portion thereof, of habitable floor space.

(e) Duplicate measurements shall be taken in ten percent (10%) of the measurement device locations.

C.1.4(f)

(f) For each twenty (20) devices, one (1) additional measurement device shall be opened, immediately resealed for the remainder of the exposure period, and processed with the other exposed measurement devices.

(g) Measurement devices must remain undisturbed during the measurement period or the reading shall be declared invalid. A new measurement shall be taken.

(h) Measurement devices must be placed as follows:

(1) Between two and six (2 & 6) feet above the floor;

(2) A minimum of one and one-half (1.5) feet from any wall;

(3) Away from room corners, windows, drafts, direct sunlight, and any device that emits heat or moisture;

(4) In areas of normal air supply;

(5) Where the device shall not be blocked or covered during the measurement period.

C.1.5 **General Measurement Requirements.**

(a) The HVAC system shall be operated, for the entire measurement period, in the normal heating, cooling, or ventilation cycle required for the building and the time of year.

(b) Documentation shall be included on the operation of the HVAC system.

C.1.6 **Short Term Testing Requirements.**

(a) During short term testing:

(1) The building to be tested shall be left closed at least twelve (12) hours prior to and during the entire test measurement period. Routine entrances and exits are allowed.

(2) The measurement devices shall be left in place for a minimum of forty-eight (48) hours.

(b) Short term tests shall not be conducted when severe storms, high winds, heavy rainfalls, or rapid barometric changes are predicted.

(c) Short term measurements in any public and high priority buildings identified in section C.1.2 of this part, shall be conducted during the months of October through March excluding weekends and holidays.

C.1.7 **Follow-up Testing Requirements.**

(a) Short term measurements greater than or equal to 4 pCi/L (0.02 WL) but less than 20 pCi/L (0.1 WL) require the following steps to be taken:

C.1.7(a)(1)

(1) Begin follow-up testing within three (3) months.

(2) Expose the measurement device for a minimum of one hundred and twenty (120) days and no more than one (1) year.

(b) Short term measurement results greater than or equal to 20 pCi/L (0.1 WL) but less than 100 pCi/L (0.5 WL) require the following steps to be taken:

(1) Begin follow-up testing within twenty (20) calendar days after receiving the short term results.

(2) Expose the measurement device for a minimum of thirty (30) days but no longer than ninety (90) days.

(c) Short term measurement results greater than 100 pCi/L (0.5 WL) require the following steps to be taken:

(1) Begin follow-up testing within ten (10) calendar days after receiving the short term results.

(2) Expose the measurement device for a minimum of ten (10) days but no longer than forty-five (45) days.

(3) After the measurement period is complete, increase the amount of ventilation to the room until measurement results are available. If levels are found to be above normal, continue the increased ventilation until permanent steps are taken to reduce the level.

(d) Windows and doors shall be operated as usual for the building and the time of year.

(e) Follow-up testing will be conducted in school buildings during the occupied portion of the school year, but may include both weekends and holidays other than summer vacation.

C.2 MEASUREMENT PROTOCOLS FOR RADON IN WATER

C.2.1 **Water Protocols.** Measurement protocols for radon in water will be adopted into these regulations once the standard is promulgated by EPA.

RULES AND REGULATIONS FOR RADON CONTROL

CHAPTER 23-61

PART D

MITIGATION PROTOCOLS FOR PUBLIC AND HIGH PRIORITY BUILDINGS

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF HEALTH

PART D

MITIGATION PROTOCOLS FOR PUBLIC AND HIGH PRIORITY BUILDINGS

D.1 MITIGATION PROTOCOLS FOR RADON IN AIR

D.1.1 **Purpose and Scope.** These protocols are designed for radon reduction mitigation in areas of public and high priority buildings found, after follow-up testing, to have radon levels greater than or equal to 4 pCi/L (0.02 WL).

D.1.2 **Mitigation System Requirements.**

(a) Licensed radon mitigation contractors shall follow standardized mitigation procedures as contained in the applicable EPA documents or their most recent editions, referenced as follows:

TITLE

EPA Radon Mitigation Standards - EPA 402-R-93-078

Mitigation Techniques in Schools - EPA 520/1-89-020

Reducing Radon In Structures - Third Edition

(b) Radon reduction systems shall be clearly labeled with the following information:

(1) Identification as a radon mitigation system.

(2) Name, address, telephone number, and license number of the contractor.

(3) Date of installation.

(c) All active radon reduction systems will be designed to run continuously.

D.1.3 **Back-Drafting.** Licensed radon mitigation contractors shall test for back drafting to ensure that all combustion systems have sufficient air supply. Procedures and checklist for conducting backdrafting tests are found in paragraph 11.3 of the "EPA Radon Mitigation Standards".

D.2 MITIGATION PROTOCOLS FOR RADON IN WATER

D.2.1 **Mitigation Protocols.** Mitigation protocols for radon in water will be adopted into these regulations once the standard is promulgated by EPA.

RULES AND REGULATIONS FOR RADON CONTROL

CHAPTER 23-61

PART E

OWNER RESPONSIBILITIES FOR PUBLIC AND HIGH PRIORITY BUILDINGS

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF HEALTH

PART E

OWNER RESPONSIBILITIES FOR PUBLIC AND HIGH PRIORITY BUILDINGS

E.1 RADON MEASUREMENT RESPONSIBILITIES

E.1.1 **Buildings Requiring Radon Testing.** All public and high priority buildings, as identified in section C.1.2 of these regulations, must be measured for radon or radon progeny using the procedures and protocols identified in part C of these regulations.

E.1.2 **Testing of Buildings.** It is the responsibility of the owner of a building or buildings to:

(a) Submit a radon testing schedule to the Agency, identifying each building and the dates of initial short term radon testing scheduled for each building. Testing schedules shall be designed to insure that child occupied buildings are completed first. All schedules must be submitted to the Agency within six (6) months after the effective date of these regulations.

(b) Complete all initial short term testing within three (3) years after the effective date of these regulations.

(c) Report all short term test results to the Agency within thirty (30) days of receipt of results.

(d) Retest any area which has initial short term measurements of 4 pCi/L (0.02 WL) or greater, using follow-up testing requirements as described in section C.1.7.

E.1.3 **Retesting of Buildings.** If initial short term measurements are less than 4 pCi/L (0.02 WL), ten (10) percent of the first floor and below ground areas of the building must be retested three (3) years after the initial testing. A different ten (10) percent of the building must be tested every three (3) years thereafter.

E.1.4 **Recordkeeping Requirements.** The building owner shall maintain the following records until disposal is authorized in writing by the Department.

(a) Schedule for initial short term testing.

(b) Annotated floor plan of each building tested showing short and follow-up testing locations.

(c) Documentation of all radon measurements taken.

(d) A list of any and all mitigation systems installed.

E.2 RADON MITIGATION RESPONSIBILITIES

E.2.1 **Mitigation Requirements.**

(a) Any area of a public or high priority building having an annual average level of radon in excess of or equal to 4 pCi/L (0.02 WL) as determined by follow-up measurements must be mitigated to a level below 4 pCi/L (0.02 WL).

(b) Mitigation systems installations shall be completed according to the following schedule:

(1) Within one (1) year for results greater than or equal to 4 pCi/L (0.02 WL) but less than 20 pCi/L (0.1 WL).

(2) Within six (6) months for results greater than or equal to 20 pCi/L (0.1 WL) but less than 100 pCi/L (0. WL).

(3) Within sixty (60) days for results greater than or equal to 100 pCi/L (0.5 WL).

E.2.2 **Post Mitigation Requirements.**

(a) After installation of a mitigation system, measurements shall be repeated in all mitigated rooms or areas, using the guidelines for initial short term measurements as identified in sections C.1.3 through C.1.6 of these regulations.

(b) Post mitigation measurements shall be taken by a certified radon measurement business which is not subject to the radon mitigation contractor's control or supervision.

(c) The building owner shall ensure that all post mitigation measurement results are submitted to the agency within thirty (30) days of any mitigation system installation.