2900-FM-BRP0010a Rev. 11/2022 Introduction



# Pennsylvania Radon Certification Forms and Information

(Please Retain this Information for Future Reference)

For more information, visit www.dep.pa.gov.



Bureau of Radiation Protection Radon Division

## TABLE OF CONTENTS

## SECTION 1 GENERAL INFORMATION

1.1	Introduction	1
1.2	Changes to Current Certification	5
1.3	Testing/Laboratory Protocols and Mitigation Standards	8
1.4	Certification Compliance	8
1.5	Testing, Mitigation and Laboratory Inspections	10
1.6	Radon Record Retention Requirements	
1.7	Quality Assurance (QA) Requirements for Primary Testers	
1.8	Home Improvement Contractor Registration	14

## SECTION 2 RADON CERTIFICATION APPLICATION

2.1	Rado	n Certification Application Instructions	15
2.2	Initial	Certification Checklists	17
	2.2.1	Checklist A Initial Testing Individual and/or Firm	17
		Certification Application	
	2.2.2	Checklist B Initial Mitigation Individual and/or Firm	20
		Certification Application	
	2.2.3	Checklist C Initial Laboratory Individual and/or Firm	23
		Certification Application	
2.3	Rene	wal Certification Checklists	25
	2.3.1	Checklist D Renewal Testing Individual and/or Firm	25
		Certification Application	
	2.3.2	Checklist E Renewal Mitigation Individual and/or Firm	28
		Certification Application	
	2.3.3	Checklist F Renewal Laboratory Individual and/or Firm	31
		Certification Application	
2.4	Rado	n Certification Application, General Section	34
	and A	dditional Application Forms	
2.5	Mitiga	ation Worker Health and Safety Plan	51
2.6	Rado	n Exposure Tracking Record	53
2.7	Rado	n Mitigation Standards Agreement	54
2.8	Electi	on of Post-Mitigation Testing Options Form	55
2.9	Rado	n Testing Employee Application	56
2.10	Rado	n Mitigation Employee Application	57
2.11	Rado	n Laboratory Employee Application	58
2.12	Testir	ng Firm Certification Ownership Form	59
2.13	Mitiga	ation Firm Certification Ownership Form	60
2.14	Labor	atory Firm Certification Ownership Form	61

### SECTION 3 REQUIRED REPORTING

3.1	45-Day Reporting to DEP	62
	Formats for Uploading Files via DEP GreenPort	
3.3	Instructions for Web Based Reporting via DEP GreenPort	66
3.4	Codes for Testing and Mitigation	75
3.5	Reporting Results to the Client	76

### SECTION 4 DEP-APPROVED EXAM/COURSE INFORMATION

4.1	DEP-Approved Exam Providers	.78
4.2	DEP-Approved Course Information	78

### SECTION 5 QUALITY ASSURANCE PROGRAM

5.1	Basis and Philosophy	80
5.2	QA Plan Element Format	80
5.3	Signature Page	80
5.4	Table of Contents	81
5.5	Organization and Responsibility	82
5.6	Sampling Procedures	82
5.7	Detector Custody	83
5.8	Calibration Procedures	83
5.9	Analytical Procedures	84
5.10	Data Calculation, Validation, and Reporting	84
5.11	Internal Quality Control Checks	85
5.12	Procedures Used to Assess Precision, Relative Bias, and Lower Limit of Detection	86
5.13	Quality Assurance Audits	86
5.14	Corrective Action	87
5.15	Quality Assurance Reports to Management	87
SECT	ION 6 RADON MITIGATION ACTIVE SYSTEM FEE FORM	88
SECT	ION 7 PHOTOGRAPHY GUIDELINES	89

#### **SECTION 1**

#### **GENERAL INFORMATION**

#### **1.1 INTRODUCTION**

This information book has been compiled to provide assistance to anyone applying for radon certification in Pennsylvania and as a reference document for those currently certified.

#### 1.1.1 <u>Regulatory Authority</u>

The Radon Certification Act (act of July 9, 1987, P.L. 238, No. 43) requires the Department of Environmental Protection (DEP) to establish, by regulation, a certification program for persons conducting radon gas and radon progeny testing, laboratory analysis, and mitigation of radon contamination in buildings. Pursuant to the act DEP promulgated radon certification regulations at 25 Pa. Code Chapter 240.

The primary purpose of the Radon Certification Act and the subsequent Chapter 240 Radon Certification Regulations is to protect the health and safety of the public and to protect the public from unqualified or unscrupulous persons.

Radon certification has been required by Pennsylvania state regulation since September 21, 1988. Radon certification must be obtained <u>before</u> any person conducts radon testing, radon mitigation, or radon laboratory analysis in Pennsylvania, with the exception of the few activities listed below.

- Testing for or mitigating against radon contamination in a building that the person owns or in which a person resides.
- Using measures designed to prevent radon contamination in newly constructed buildings. This exception does not apply to radon testing or installation of radon mitigating devices in these buildings following occupancy.
- Performing testing or mitigation in the course of the person's normal duties as an employee or contractor of DEP or the federal government.
- Performing scientific research if the person discloses the information obtained to DEP under § 240.303 (relating to reporting of information) and the person informs the owner or occupant of the affected building of all of the following:
  - 1. That the person is not certified by DEP to test or mitigate against radon contamination.
  - 2. That the test results are not valid.
  - 3. That the mitigation methods are for experimental purposes and may be unsuccessful.
- Purveying, radon testing secondary devices, such as activated charcoal, liquid scintillation, or alpha track, supplied by a certified laboratory, if radon concentrations determined by the laboratory are only reported directly to the owner or resident of the building tested.
  - 1. Test results may also be reported to the certified mitigator who installed a mitigation system at the property.
  - 2. Purveying does not include the activities of either placing or retrieving activated charcoal, liquid scintillation, or alpha track radon testing devices.
- Employed by a local government or a school and performing testing for that local government or school if all of the following criteria are met:
  - 1. The practice is limited to the employee's official duties and no fee is charged for the testing except for the employee's salary.
  - 2. Radon testing is limited to the buildings owned or occupied by the local government or school.
  - 3. The radon testing is performed in accordance with the device manufacturer's instructions.

#### 1.1.2 National Radon Health Advisory

Radon is a colorless and odorless naturally occurring radioactive gas. Both the U.S. Surgeon General and the American Lung Association consider radon to be the second leading cause of lung cancer.

2900-FM-BRP0010a Rev. 11/2022 Introduction

#### 1.1.3 How to Contact Us

 Physical Address
 Department of Environmental Protection (DEP)

 Bureau of Radiation Protection, Radon Division
 Rachel Carson State Office Building, 13th Floor

 400 Market Street, Harrisburg, PA 17101
 or

Mailing AddressDepartment of Environmental Protection (DEP)<br/>Bureau of Radiation Protection, Radon Division<br/>P.O. Box 8469<br/>Harrisburg, PA 17105-8469<br/>Phone (717) 783-3594/1-800-23RADON<br/>FAX (717) 783-8965<br/>Online www.dep.pa.gov

#### 1.1.4 Activities Which Require Certification

There are three general types of radon activities. Each type of activity requires separate certification.

#### 1.1.4.1 Radon Testing

#### Radon-In-Air Testing

This type of DEP individual testing certification or DEP testing firm employee approval is required for any of the following:

- Placing and/or retrieving of any radon testing device. (Secondary Testing).
- The reading and/or analyzing of continuous radon monitors and/or electret ion chambers that are
  placed and retrieved by the DEP-certified testing individual and/or any of that individual's
  DEP-approved testing firm employee(s). (Primary Testing).

#### Radon-In-Water Testing

Currently no definitive federal guidelines exist for radon in water concentrations or testing procedures. Therefore, DEP does not certify persons providing radon in water testing and laboratory analysis for the public. A list of persons providing these services is available upon request.

#### 1.1.4.2 Radon Mitigation

This type of DEP mitigation individual certification or DEP firm employee approval is required for any person who repairs or alters a building or building design for the purpose of, in whole or in part, reducing the concentration of radon in the indoor atmosphere.

#### 1.1.4.3 Radon Laboratory

This type of DEP individual laboratory certification or DEP firm employee approval is required for persons who perform analysis of active or passive radon-in-air devices in Pennsylvania or of those devices placed and retrieved in Pennsylvania.

#### 1.1.5 <u>Categories of Certification</u>

#### 1.1.5.1 Individual Certification Only

To receive individual certification the applicant must meet the prerequisites listed in the applicable section of <u>25 Pa. Code Chapter 240</u>, The Radon Certification Regulations.

No one, except the certified individual, may perform a radon-related activity under an individual certification. Radon certification as an "individual" result in only the given name of the individual being listed on the certificate and in DEP's Radon Services Directory.

## 1.1.5.2 Individual Certification with a Firm Certification Added (An individual certification must exist in order to add a firm certification.)

A firm certification may be added to an individual certification at any time. In addition to the certified individual, other employees of the firm may, upon receipt of written approval from DEP, perform the activities for which the firm's certified individual is certified. Certification as a "firm" results in the firm name being listed on the certificate, and in DEP's Radon Services Directory. The firm certification

lapses and becomes void if the certified individual for that firm is no longer in responsible charge of that firm's radon-related activity. The employee's DEP listing also becomes invalid. Employee's may only be added to an individual certification that also has a firm certification added.

#### 1.1.6 <u>Device Proficiency</u>

An initial primary testing individual applicant, initial laboratory individual applicant, or an applicant applying to add a new primary testing or laboratory device shall provide written evidence of successful participation in a DEP-approved radon measurement proficiency program for <u>each model</u> of CRM (e.g., Sun Radon 1027, 1028, 1028XP, 1030; RadStar RS300, RS Alpha 310, RS800; etc.), or electret reader (e.g. Rad Elec E-Perm, SPER-1; RA-Dome Electret; etc.).

Any chamber approved by one of two professional organizations, the National Radon Safety Board (NRSB) and the National Radon Proficiency Program (NRPP), for device proficiency is approved by DEP. A chamber will only perform device proficiency on devices that are approved by that same organization. For example, TCS Industries' chamber is approved by NRSB and will only perform a device proficiency for those devices approved by NRSB.

Renewal certification applicants are not required to repeat this initial device proficiency requirement as long as the required QA/QC program is maintained, and the same device model is listed on the renewal application. The following chambers are DEP approved:

Bowser-Morner, Inc.	TCS Industries Inc.	KSU Radon Chamber
4514 Taylorsville Road	4326 Crestview Road	2323 Anderson Avenue, Suite 300
Dayton, OH 45424	Harrisburg, PA 17112	Manhattan, KS 66502
Phone: (937) 236-8805	Phone: (717) 657-7032	Phone: (785) 532-6026
Fax: (937) 233-2024	Email: <u>radondetek@comcast.net</u>	Email: <u>radonchamber@ksu.edu</u>
www.bowser-morner.com	www.radondetek.com	www.ksuradonchamber.org

#### 1.1.7 Identification Cards (ID Cards)

In order to aid the consumer in identifying persons legally able to perform radon services in Pennsylvania, an ID card program has been established. ID Cards shall be presented to a client upon request.

The following persons must obtain DEP ID cards:

- individuals for testing certification.
- individuals for mitigation certification.
- testing firm employees.
- mitigation firm employees.

Please submit an updated photo taken within the last 3 months as a JPG file via email to <u>RA-EPRadon@pa.gov</u>.

#### 1.1.8 <u>Subcontracting</u>

- When a person subcontracts radon testing, mitigation, or laboratory analysis, subcontractors providing such services shall be certified by DEP to perform the specific service.
- A person may perform only the radon-related service(s) for which they are certified. For example, a person certified by DEP solely to perform charcoal testing, may not use any other testing device (e.g., continuous radon monitor).
- A person may not represent or advertise that they perform radon services unless they themselves are certified. If a person subcontracts radon services but is not certified to perform them, they may not imply, represent, or advertise that they provide these services. Advertising for a radon-related service or product must include the valid DEP certification number of the certified individual providing that service.

#### 1.1.9 <u>Radon Services Directory</u>

- Each certified individual, each certified firm, and each testing or mitigation firm employee may list no more than one name (under which the firm or individual intends to engage in radon activities), one phone number and one address in DEP's Radon Services Directory.
- The list is posted monthly and is prepared alphabetically and by county. Newly certified individuals and firms are listed in the month immediately following final certification.

• The current list is available to the public upon request and accessible on the internet at <u>www.dep.pa.gov/radon</u>.

#### 1.1.10 Certification Renewals

- Submitting a renewal application does not extend your previous two-year certification period.
- A person may not provide radon-related services without current certification.
- In order to avoid a lapse in certification, applicants for certification renewal should file their application a minimum of 30 days prior to the expiration of their current certification.

It is the responsibility of the certified individual to submit a timely application for certification renewal. The following criteria will determine what is considered to be a late application:

- 1.) <u>Individual certification applications postmarked prior to one year after the expiration of that certification</u> shall be a renewal application and include the late application fee of \$150.
- 2.) <u>Individual certification applications postmarked more than one year after expiration of the certification</u> shall be subject to initial application requirements. The applicant is not subject to the \$150 late application fee.

#### 1.1.11 Withdrawal of an Application or Certification

- After application submittal and before certification is granted, an applicant may withdraw their application; fees are nonrefundable.
- A certified individual may at any time request that DEP withdraw certification.
- Requests for withdrawal of an application or certification shall be submitted in writing and bear the signature of the certified individual.
- DEP will confirm the withdrawal request in writing.

Once an application for certification is withdrawn, a person may request to have the application reinstated prior to expiration of current certification. A person who wishes to reapply for certification after the expiration of the person's previous certification shall submit a new application along with appropriate fees.

#### 1.1.12 Radon Certification Fees

Submit a check or money order payable to the "Commonwealth of Pennsylvania" for the total amount of applicable fees.

RADON CERTIFIC	ATION FEE SCHEDULE
Testing Individual Only	\$525 every two years
Add Testing Firm to Existing Testing Individual	\$1050 every two years
Testing Firm Employee	\$150 (each)
Primary Testing Device Fee	\$150 every two years <sup>(1)</sup>
Mitigation Individual Only	\$450 every two years
Add Mitigation Firm to Existing Mitigation Individual	\$1050 every two years
Laboratory Individual Only	\$600 every two years
Add Laboratory Firm to Existing Lab Individual	\$1125 every two years
Late 45-Day Reporting	\$150 <sup>(2)</sup>
Late Application Renewal	\$150 <sup>(3)</sup> (applies only to Individual Certifications.)

#### November 2022

- <sup>(1)</sup> Primary radon testers shall submit the Primary Testing Device Fee as specified in the Radon Certification Fee Schedule for each **TYPE AND MANUFACTURER** of device they place/retrieve and read/analyze. This fee covers additional administrative duties associated with primary devices. The two **TYPES** of primary devices are electret readers and continuous radon monitors. The \$150 Fee for electret readers covers short term and/or long term and any number of electret readers. The \$150 Fee for continuous radon monitors covers any number of continuous radon monitors of the **SAME MANUFACTURER** (e.g. Sun Radon; RadStar; etc.).
- <sup>(2)</sup> Anyone not submitting the required 45-day laboratory analysis and/or mitigation reporting within 90 calendar days of the completion of radon testing, laboratory analysis, and/or mitigation installation date (or submitting "No Radon Activities Performed" in GreenPort, if no activities have been performed during this period) will be subject to the Late 45-Day Reporting Fee as specified in this schedule.
- <sup>(3)</sup> Any individual renewal certification application that is postmarked after the previous certification's expiration date will be considered late and charged this late application renewal fee. All applications are either renewal or initial. A renewal application is defined as any application postmarked less than one year after the previous certification expiration date. All other applications are initial applications.

Submitting a renewal application does not extend your previous two-year certification period. You may not provide radon services without current certification.

#### **1.2 CHANGES TO CURRENT CERTIFICATION**

#### 1.2.1 <u>Requirements to Add a New Type of Secondary or Primary Testing Device to a Testing Individual</u>

- 1.2.1.1 <u>To Add a New Type of Secondary Testing Device (testing devices you only place/retrieve)</u> submit the following:
  - A written request signed by the certified testing individual via mail, fax or email. (The date a device is added to an individual's certification may not be backdated.)
  - A complete Quality Assurance Plan for that device, including a copy of the result report form you will be giving to clients.
  - Written approval from DEP must be received prior to performing any testing with this device in Pennsylvania.
- 1.2.1.2 <u>To Add a New Type of Primary Testing Device (Continuous Radon Monitors (CRM) or electret</u> <u>ion chambers you place/retrieve and read/analyze) or Laboratory Device to a Testing or</u> <u>Laboratory Individual Certification submit the following:</u>
  - A written request signed by the Certified Testing or Laboratory Individual via mail, fax or email. Include the specific serial number of each CRM or electret reader you are requesting to add. (The date a device is added to a certification may not be backdated).
  - The \$150 Primary Testing Device Fee. As long as all listed devices are the <u>same</u> <u>manufacturer</u> (i.e. Sun Radon, RadStar, etc. for CRMs; Rad Elec, etc. for electret ion chambers), only one \$150 primary device fee will be assessed. (Not required for Laboratory Individuals).
  - A complete Quality Assurance Plan for that device, including a copy of the result report form you will be giving to clients.
  - Proof of primary device proficiency. (See Section 1.1.6.)
  - If adding electret ion chambers, complete and submit the QA Form for Electret Ion Chamber Primary Testing and/or Laboratory. (See Section 2.4.7.)
  - If adding a new model of continuous radon monitor, complete and submit the QA Form for Continuous Radon Monitor Primary Testing and Laboratory. (See Section 2.4.6.)
  - Proof of current calibration for each specific serial numbered CRM or electret reader you are requesting to add.

No testing and/or analysis may be performed with a device you are requesting be added to your certification prior to the specified date in the written approval issued by DEP.

#### 1.2.1.3 <u>To add a specific-serial numbered CRM or electret reader to a currently Listed Primary</u> <u>Testing Device of the same type and manufacturer (Continuous radon monitors (CRM) or</u> <u>electret ion chambers placed/retrieved and read/analyzed) submit the following:</u>

- A written request signed by the certified testing individual via mail, fax or email. Include the specific serial number of each CRM or electret reader you are requesting to add. (The date a device is added to a certification may not be backdated.)
- Proof of current calibration for each specific serial numbered CRM or electret reader you are requesting to add.

No testing and/or analysis may be performed with a device you are requesting be added to your certification prior to the specified date in the written approval issued by DEP.

#### 1.2.2 <u>Requirements to Remove a Radon Testing or Laboratory Device from a Testing and/or Laboratory</u> <u>Certification.</u>

- Submit a written request signed by the certified testing individual via mail, fax, or email. Include the name and, if applicable, the model of the device and the specific serial number of each CRM or electret reader you are requesting to remove. (The date a device is removed from a certification may not be backdated.)
- All required QA must be performed, including all required calibrations, until the removal date specified in the written approval issued by DEP.

#### 1.2.3 Lapse of Firm Certification Due to Loss of Certified Individual

- If a certified firm loses the certified individual who was in responsible charge of the firm's radon activities, or if the certified individual's certification expires, the firm's certification automatically lapses and is void and none of the firm employees may perform those radon-related activities.
- Within five business days of the loss of the certified individual, the firm owner of record (as designated on the latest Firm Certification Ownership Form submitted to DEP), shall notify DEP in writing.
- The firm's certification is lapsed and none of of those firm employees may perform radon activities in Pennsylvania until another certified individual is submitted by the firm owner of record and approved by DEP.

#### 1.2.4 <u>Changed Conditions of Individual Certification Due to Individual Leaving a Certified Firm</u>

- The individual is certified solely on the basis of their own qualifications, e.g., with their own quality assurance plan, health and safety plan, primary device proficiency, etc., the individual's certification remains valid after the individual leaves a firm.
- If the individual leaves the firm, that individual must inform DEP in writing with their signature that they are no longer in responsible charge of that firm and any changes that result from that (phone number, address, fax, email address, business/name changes) and a new acknowledgement form must be completed and submitted.
- In order for a certified individual to become responsible charge of an existing firm, that individual must submit to DEP a signed written request and the following updated forms: acknowledgement form, employee form(s), and firm ownership form.

#### 1.2.5 Expiration of Certification

- DEP sends a courtesy letter to the certified individual approximately 90 days prior to the expiration of any radon certification advising that the certification will expire.
- DEP also sends a courtesy letter when any certification has expired and informs that person that all radon activities previously performed under this certification must cease.
- These letters are only sent as a courtesy. DEP is in no way obligated to send these letters as each certification expiration date is clearly stated on each radon certificate.

#### 1.2.6 Adding Firm Employees to an Individual Certification with a Firm Certification

#### 1.2.6.1 Adding Testing Firm Employees

All employees of certified testing firms who place and retrieve radon detectors shall meet the criteria below within 10 business days of performing radon testing in the Commonwealth of Pennsylvania:

- Submit a written request signed by the certified individual.
- Submit the \$150 nonrefundable testing employee fee for each testing employee.
- Submit a completed Radon Testing Employee Application for each employee. (See Section 2.9.)
- Documentation that the firm employee received initial training pursuant to § 240.102(b)(6).
- A photo of the employee taken within the last 3 months must be submitted as a JPG file via email to <u>RA-EPRadon@pa.gov</u>.
- The Firm's certified individual shall receive written approval and an ID card for the testing firm employee.

#### 1.2.6.2 Adding Mitigation Firm Employees

All employees of certified mitigation firms who perform mitigation activities shall meet the criteria below within 10 business days of performing mitigation activities in the Commonwealth of Pennsylvania:

- Submit a written request signed by the certified individual.
- Submit a completed Radon Mitigation Employee Application for each employee. (See Section 2.10.)
- Documentation that the firm employee received initial training pursuant to § 240.112(b)(6).
- A photo of the employee taken within the last 3 months must be submitted as a JPG file via email to <u>RA-EPRadon@pa.gov</u>.
- The firm's certified individual shall receive written approval and an ID card for the mitigation firm employee.

#### 1.2.6.3 Adding Laboratory Firm Employees

All employees of certified laboratory firms who analyze any radon devices placed and/or retrieved in Pennsylvania shall meet the criteria below prior to conducting radon laboratory activities in the Commonwealth of Pennsylvania.

- Submit a written request signed by the certified individual.
- Submit a completed Radon Laboratory Employee Application for each employee. (See Section 2.11.)
- Documentation that the firm employee received initial training pursuant to § 240.122(b)(6).
- A firm's certified individual shall receive written approval from DEP prior to conducting radon laboratory activities as a laboratory firm employee.

#### 1.2.7 Adding Firm Certification to an Individual Only Certification

- Complete and submit the General Section 2.4 including the required fee.
- Submit the name of any employees who will be performing radon related activities and the requirements for those firm employees as listed above in Section 1.2.6.
- Complete and submit the following appropriate Certified Individual Acknowledgement Form:
  - Testing Firm Certification Section 2.4.1
  - Mitigation Firm Certification Section 2.4.2
  - Laboratory Firm Certification Section 2.4.3
- Complete and submit the following appropriate Firm Certification Ownership Form:

Testing Certification Firm Ownership Form – Section 2.12 Mitigation Certification Firm Ownership Form – Section 2.13 Laboratory Certification Firm Ownership Form – Section 2.14

#### 1.2.8 Notification of Changes to a Certification

It is the certified individual's responsibility to notify DEP within 10 business days of any changes which may affect their certification. All notifications of changes must be made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax, or by e-mailing a PDF of the scanned document.

- Loss/change of certified individual.
- Change in firm name.
- Change in mailing or business location addresses.
- Change in telephone or fax number.
- Adding and/or removing firm employees.
- Change in other information relevant to the certification.
- Withdrawal of the certification.
- Change to Quality Assurance Plan.

It is the certified individual's responsibility to ensure this approval is received from DEP.

#### 1.3 TESTING/LABORATORY PROTOCOLS AND MITIGATION STANDARDS

#### 1.3.1 DEP Approved Testing and Laboratory Protocol

Pennsylvania requires all testing and/or laboratory activities be performed in compliance with the following:

- Title 25 of the Pa Code Chapter 240.310 Testing Protocols
- ANSI/AARST MAMF-2017 Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings.
- EPA 402-R-92-014 Radon Measurement in Schools, Revised Edition, July 1993.

## Recommendations referenced in these documents are required conditions of certification for all DEP-Certified Individuals and DEP-Approved Firm Employees.

In addition, all testing must be performed in the <u>"lowest livable area."</u> The basement, if any, is to be considered the lowest livable area if it can be used as a living area without major structural changes, even if it has not been renovated into a "finished" living space. Renovation could be as simple as placing a carpet on the floor where children can play or where exercise equipment can be used. Naturally, areas such as basements with ground floors or low ceilings, etc. needing major structural changes before they can be a livable area would **not** be considered a "lowest livable area."

DEP requires testing be performed in two or more locations of, "lowest livable area," if the house has separate structural zones such as a family room above a crawl space or on a slab-on-grade.

#### 1.3.2 DEP Approved Mitigation Standards

As of January 24, 2019, Pennsylvania requires all mitigation activities be performed in compliance with the following:

- Title 25 of the Pennsylvania Code Chapter 240.308 Radon Mitigation Standards for Detached and Attached Residential Buildings Three Stories or Less in Height.
- ANSI/AARST RMS-MF 2018 Radon Mitigation Standards for Multifamily Buildings.

In accordance with best practices, all mitigation systems installed after January 24, 2019, should also continue to follow the Pennsylvania Radon Mitigation Standards (1997). All mitigation systems installed prior to January 24, 2019 and after December 1, 1997, must have been installed in accordance with the Pennsylvania Radon Mitigation Standards (1997).

#### **1.4 CERTIFICATION COMPLIANCE**

If DEP determines that an individual or firm is not abiding by the radon certification regulations, DEP may implement compliance action including but not limited to: notice of violation, legal and civil penalties, suspension of certification and/or decertification of the certified individual or firm. Examples of noncompliant activities include but are not limited to noncertified person engaging in radon activities, failure to comply with 45-day reporting requirement, failure to respond to request for information, failure to follow QA/QC or protocols.

#### 1.4.1 <u>Complaint Procedure</u>

DEP requests that complaints be submitted in writing. (Proof including names, phone numbers, addresses, dates etc. are helpful.) DEP acts on all complaints. Actions taken by DEP to resolve complaints include inspections, investigations, informal communications, and formal enforcement action.

DEP generally recommends that the complainant also contact the Better Business Bureau or for consumer complaints the Pennsylvania Attorney General's Office of Consumer Protection at (800) 441-2555.

#### 1.4.2 Denial of Certification (§ 240.201)

DEP may deny a certification application under circumstances including, but not limited to, any of the following:

- The applicant or a person identified in the application is in violation of the acts or regulations.
- The application contents are incomplete, inaccurate, or not in compliance with the acts or regulations.
- The applicant fails to affirmatively demonstrate to DEP that they have the qualifications required in 25 Pa. Code Chapter 240 and is capable of performing the activities for which they are seeking certification as required by the acts and 25 Pa. Code Chapter 240.
- The applicant or a person listed in the application has been decertified under § 240.403.
- Past or continuous conduct, including a compliance history, demonstrating a lack of ability, intent, or effort to comply with the acts or regulations.

#### 1.4.3 <u>Noncompliance</u>

Generally, when DEP determines or has reason to believe that a person is violating the radon certification regulations or conditions of certification, or if it has reason to believe that the person is continuing to violate the regulations, they issue a notice of violation.

#### 1.4.4 <u>Suspension or Modification of Certification (§§ 240.203(b) and 240.205)</u>

DEP may suspend a person's certification if a condition of certification is violated. While under suspension, a person may not perform the radon-related service(s) for which their certification is suspended.

DEP may modify a person's certification under appropriate circumstances, such as when a measurement device for which the person is certified fails to pass blind study requirements.

DEP may suspend or modify a person's radon certification for failure to remain in compliance with the acts or regulations. Typical reasons for suspension or modification of radon certification include the following:

- Failure of the certified individual to conduct radon-related activities as described in the approved firm's certification application.
- Failure to allow DEP, its agents, and employees, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to the person's facilities, offices, and files for inspection and examination of records.
- Failure to allow DEP, its agents, and employees to be present while performing radon-related activities for the purpose of inspection of those activities.
- Failure to provide proof of appropriate primary device proficiency as required by § 240.307.
- Failure to report required information to DEP within the 45 days required in § 240.303.
- Failure of a certified individual to meet the conditions of certification required by §§ 240.102(c), 240.112(c), and 240.122(c).

DEP may lift the suspension or modification after the reason for the suspension or modification has been corrected. Upon written notification from DEP that the suspension or modification has been lifted, the person may resume performing the radon-related service(s) for which they are certified.

#### 1.4.5 <u>Decertification</u> (§ 240.403)

DEP may decertify a person who has violated the acts or regulations or a term or condition of certification, such as but not limited to any of the following:

• Failure to meet the qualifications for radon certification;

- A compliance history demonstrating a lack of ability, intent, or effort to comply with the acts or regulations;
- Failure to report accurate information on the certification application or failure to report information as required by § 240.303.

#### 1.4.6 <u>Civil Penalty Assessment</u>

The Radon Certification Act, at 63 P.S. §§ 2012 and 2013, confers upon DEP the powers authorized by the Radiation Protection Act (35 P.S. § 7110.302). These powers include the assessment of civil penalties (Radiation Protection Act, at 35 P.S. § 7110.308(e)) for violations of the Radon Certification Act and regulations.

The radon certification regulations (§ 240.402) authorize DEP to assess a civil penalty for a violation of the acts or regulations.

When a violation of the applicable law or regulations warrants the assessment of a civil penalty, DEP's Civil Penalty Assessment Procedure is used to determine the amount of the assessment and the procedure used for issuing the assessment.

#### 1.4.7 <u>Certification Appeal Process</u>

The appeal process is designed to provide a process by which any person aggrieved by DEP's decision on a certification may appeal that action. The appeal process is authorized by Section 4 of the Environmental Hearing Board Act. 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. Appeals shall be made to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, (800) 654-5984.

Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of the action unless the appropriate statute provides a different time period. Copies of the appeal form, and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at (717) 787-3483. This appeal notice does not, in and of itself, create any right of appeal beyond that permitted by the applicable statutes and decisional law. Final decisions of the Environmental Hearing Board may be appealed to the Pennsylvania Commonwealth Court by the timely filing of a petition for a review.

#### 1.5 TESTING, MITIGATION, AND LABORATORY INSPECTIONS

#### 1.5.1 Objective

It is the intent of DEP to inspect all persons who conduct radon-related activities in Pennsylvania at least once during their certification period, and to inspect a representative number of mitigation installations performed by certified contractors.

The purpose of conducting inspections is to ensure that all persons performing radon activities in the Commonwealth carry out these activities in accordance with their certification applications and the radon certification regulations.

The purpose of conducting courtesy inspections is to offer assistance to first time certified persons. An inspector will contact the newly certified person to arrange an appointment. The inspector will evaluate the person's radon program, and provide recommendations for compliance with Protocols, Standards, and Regulations. A courtesy inspection is voluntary.

#### 1.5.2 <u>Types of Radon Mitigation, Testing, and Laboratory Inspections</u>

1. The following routine inspections are performed on an ongoing basis:

- Courtesy inspections are performed within 9 months of becoming certified as a tester, mitigator, or laboratory. These inspections are designed to help the newly certified person understand and comply with required regulations.
- Office inspections for testers, mitigators, and laboratories are performed either in person or by correspondence via email or fax. If this inspection is performed via correspondence the certified individual sends all requested documentation to DEP.
- Mitigation system installation inspections are performed in private residences to ensure that the installed radon mitigation system is in compliance with § 240.308.

- 2. A complaint received from the public is evaluated by radon staff. If it is determined to be reasonable, the person against whom the complaint was made is given priority on the inspection list, and an inspection is performed as soon as staff is available, if the complaint cannot be resolved by other means such as by telephone.
- 3. DEP performs blind studies or performance evaluations. In order to verify accuracy of measurements obtained from the Pennsylvania certified community, DEP will periodically obtain devices from certified laboratories and primary testers and expose the devices to a known amount of radon. Reported results will be compared to expected results. Failure to provide accurate results may lead to inspection or suspension.
- 4. A re-inspection is carried out if a person has had their certification suspended or revoked and has applied for reinstatement, or if a person during a routine inspection or complaint inspection has numerous noncompliance issues. DEP may conduct a follow-up inspection to make sure all noncompliance issues have been corrected.

#### 1.5.3 Inspection Process

The majority of DEP's inspections are announced; however, DEP reserves the right to conduct unannounced inspections. Under certain circumstances such as an investigation by the attorney general's office or DEPs Bureau of Investigation (BOI), an unannounced inspection of a person's place of business may be conducted.

#### 1.5.3.1. Procedures for Conducting Inspections

The certified individual or firm is selected to be inspected based upon their last inspection date. Re-inspections are performed on certified individuals who had very poor previous inspection findings. They could be re-inspected within 6-months to one year from the time of their previous inspection.

A telephone call is made to the certified person to schedule the inspection. An appointment letter or email is then sent out to confirm the scheduled date, time, and place.

If the certified person, without 24 hours-advanced notice, breaks an announced scheduled inspection or fails to submit requested inspectable documents, a second appointment or request for inspectable documents will be arranged. If the certified person breaks the second scheduled inspection or fails to reply to this request for inspectable documents, a Notice of Violation will be issued, and the certified person will be required to bring all inspection related documents to the Rachel Carson State Office Building at 400 Market Street, Harrisburg, Pennsylvania. If this third inspection appointment is missed, a suspension order will be issued and remain in effect until a satisfactory inspection is conducted. If a satisfactory inspection cannot be completed, a Decertification Order will be issued.

Inspections of actual radon mitigation installations in private residences are conducted without the knowledge of the certified contractor who installed the system. Only after the inspections are completed is a letter sent to the contractor to inform them of the findings and any necessary corrective actions. Typically, an on-site mitigation office inspection follows these private residence inspections in order to discuss the in-house findings with the contractor.

Courtesy inspections will always be conducted on-site. DEP believes that these types of inspections require a much more hands-on approach. DEP does not issue "Summary of Inspection Finding" letters during these inspections; instead DEP discusses the inspection findings during an exit interview and request that any deficiencies be corrected. DEP does follow-up with a letter of the inspection findings to the certified individual. The courtesy inspection is often conducted within 9 months after initial certification, and the certified individual has time to correct deficiencies that are required on a yearly basis.

#### 1.5.3.2. Procedures for Conducting Correspondence Inspections

DEP will select the individual to be inspected based upon the same procedure as above. A letter will then be sent requesting that the specific information be sent to DEP via:

- 1. Paper copies (do not send originals) to: Radon Audit, Pennsylvania DEP, Bureau of Radiation Protection, P.O. Box 8469, Harrisburg, PA 17105-8469.
- 2. Fax to 717-783-8965 (Attention: Radon Audit).
- E-mail to: <u>RA-EPRadonaudit@pa.gov</u> (Note: There is a maximum 34 MB e-mail message size limit including attachments. If needed, separate file and send multiple e-mails. This system will not accept ZIP files.)

4. Or a combination of all of the above.

If the requested inspection items are not submitted as required, a Notice of Violation will be issued, and the certified person will be requested to bring all inspection related documents to the Rachel Carson State Building at 400 Market Street, Harrisburg, Pennsylvania. If this appointment is missed, a suspension order will be issued and remain in effect until a satisfactory inspection is conducted. If a satisfactory inspection cannot be completed, a Decertification Order will be issued.

#### 1.5.4 Inspection Report

A Letter of Acknowledgment is sent to a person who has a satisfactory (in-compliance) inspection. If the inspector notes areas for improvement or provides suggestions, this information may be included in this Letter of Acknowledgment. The improvements or suggestions are not DEP radon mitigation standards, DEP-approved radon testing protocols, or certification requirements, but practices and procedures which DEP deems useful and prudent based on current literature, radon mitigation techniques, and scientific testing procedures.

If items of non-compliance are found, a letter entitled "Notice of Violation" is sent by certified and first-class mail from the inspector. The letter lists the violations, references the appropriate section of the regulations (25 Pa. Code Chapter 240), the person's certification, and DEP approved radon protocols and standards as appropriate for the specific noncompliance issue(s). The letter requests that DEP be notified within 20 days of the date of the letter of the progress in correcting the violation(s). Upon satisfactory resolution of the violation(s), a Letter of Acknowledgement is issued, which advises that the corrective actions will be reviewed at the next inspection.

#### 1.6 RADON RECORD RETENTION REQUIREMENTS

The DEP-Certified Individual is responsible for maintaining all radon testing, mitigation, and laboratory records in accordance with the following guidelines.

#### 1.6.1 For Radon Testing and Laboratory Activities

- Documentation of each test result containing the items outlined in § 240.303(1)(i) shall be retained for a minimum of five years.
- All quality assurance documentation (including calibration records, QC measurements, QC charts, QA reports and corrective actions) shall be retained for a minimum of 5 years.
- Continuing education records shall be retained for 5 years.

#### 1.6.2 For Radon Mitigation Activities

- Documentation of each mitigation installation containing the items as outlined in the § 240.303(2)(i) shall be maintained for at least 5 years.
- Records of each mitigator's exposure to radon during the course of employment shall be retained for a period of 5 years.
- Continuing education records shall be retained for 5 years.

#### 1.7 QUALITY ASSURANCE (QA) REQUIREMENTS FOR PRIMARY TESTERS

Any person performing primary testing activities (i.e. placing/retrieving AND reading/analyzing a testing device) in Pennsylvania is required, at a minimum, to perform the following QA for each serial numbered monitor, electret reader and for their short-term and long-term electrets as long as the tester is DEP-listed for that device. All records of these QA requirements must be maintained for a minimum of 5 years.

#### 1.7.1 Continuous Radon Monitors (CRM)

- **1.7.1.1 Calibration.** Each DEP-listed continuous radon monitor must be calibrated in a DEP-approved calibration facility at least one year from the date of the previous calibration (unless it is the initial calibration for a newly listed monitor) and whenever any alterations or repairs are made to the monitor.
- **1.7.1.2 Background measurements.** Background measurements shall be performed and documented after every 1,000 hours of operation of scintillation cell-type continuous radon monitors. These

background measurements shall be checked by purging the monitor with clean, aged air or nitrogen in accordance with the manufacturer's instructions. In addition, the background shall be monitored in accordance with the manufacturer's instruction for all continuous radon monitors.

- 1.7.1.3 Check source counting. For a continuous radon monitor with a check source, check source counting shall be completed and documented with that check source prior to each test.
- **1.7.1.4 Intercomparison measurements.** Intercomparison measurements shall be performed for each continuous radon monitor without a check source.
  - Intercomparison measurements shall be made at least every tenth test with another DEP-listed 1. passive device that is analyzed by a DEP-certified laboratory or with another continuous radon monitor with a hard copy printout.
  - 2. Intercomparison measurements shall be distributed systematically throughout the entire population of test locations.
  - 3. Intercomparison measurements shall be performed with the devices side-by-side.
  - 4. A measurement of at least 48 hours shall be conducted.
  - 5. Original printouts or DEP-certified laboratory results, or both, shall be kept for each intercomparison.

#### 1.7.2 Electret Ion Chambers (Short-term and Long-term)

- 1.7.2.1 Calibration. Each DEP-listed electret reader shall be calibrated simultaneously with its corresponding reference electret's recertification. Each DEP-listed electret reader must have a current calibration. To have a current calibration, the electret reader shall be calibrated in a DEP-approved calibration facility within one year from the date of the previous calibration and when alterations or repairs are made to the electret reader.
- **1.7.2.2 Known exposure measurements (spikes) –** Spikes consist of electrets that have been exposed to known concentrations in a DEP-approved radon chamber. Spikes shall be conducted at a rate of three for each 100 test devices deployed with a minimum of three spikes for each certification year when tests were conducted in the certification year, and a maximum of six spikes each month. These spike electrets shall be labeled and analyzed in the same manner as all other testing. Spikes shall be monitored using a means control chart. The means control chart must be established as follows:
  - Using a Relative Percent Error (RPE) value of plus and minus 10% which corresponds to the 1 sigma level.
  - A warning level of the RPE of plus and minus 20% which corresponds to the 2 sigma warning level.
  - Control limits of the RPE of plus and minus 30% which corresponds to the 3 sigma control level.

Each RPE value shall be plotted on the means control chart within one week of return of the electret from the chamber. If the RPE value is outside the 3 sigma control level, all measurements shall cease until the problem is evaluated and corrected. All evaluations shall be documented.

In addition to the means control chart, all spikes shall be documented on a form that contains all of the following:

- Radon chamber name.
- Electret serial numbers.
- Reference value (RV) from radon chamber.
- Measured spike value(s).
- Individual RPE results.
- Beginning date and end date of certification year.
- Exposure dates.
- All corrective actions performed, if applicable.
- 1.7.2.3 Duplicate measurements. Duplicates are side-by-side measurements that shall be made in at least 10% of the total number of test devices deployed each month, or 50 each month, whichever is smaller. The locations selected for duplicate measurement shall be distributed systematically throughout the entire population of samples. Duplicate devices shall be treated identically in every November 2022

respect and not identified as duplicates if sent to a DEP-certified laboratory. Duplicates shall be documented.

**1.7.2.4 Voltmeter routine instrument checks.** Proper operation of the surface voltmeter shall be monitored following the manufacturers procedures for zeroing the voltmeter and analyzing the reference electrets. These checks shall be conducted at least once a week while the voltmeter is in use and shall be documented. A voltage reading of a reference electret difference of more than two volts from the reference electret specified value shall be considered a wrong reading. The second reference electret in the set shall be read to determine whether the wrong reading is in the first reference electret or in the reader. Corrective action shall be taken in consultation with the manufacturer. When zeroing the reader, if the voltmeter displays more than plus or minus three volts, corrective action shall be taken in consultation with the manufacturer.

#### 1.7.3 <u>DEP-approved Chambers for Calibration and Spikes</u>

DEP approves the following chambers for the performance of all required calibrations and spikes:

- National Radon Proficiency Program (NRPP)-listed chambers. (<u>https://nrpp.info/devices/performance-testing-calibrations/</u>)
- National Radon Safety Board (NRSB)-listed chambers. (https://nrsb.org/radon-chambers/nrsb-accredited-chambers/)

To determine which chambers are approved by NRPP and NRSB, visit the websites listed above.

#### **1.8 HOME IMPROVEMENT CONTRACTOR REGISTRATION**

- Home Improvement Contractor Registration with the Pennsylvania Attorney General's Office is now the law for anyone performing work inside, outside, or on a home, and making more than \$5,000 in a calendar year.
- This registration is only required for residential property and does not apply to commercial, new home construction, municipal, or industrial work.
- This required registration is \$50 for a two-year registration, and proof of liability insurance for a minimum of \$50,000 is required. Each registrant is given a registration number and a certificate. This registration number is required on all advertisements distributed within this Commonwealth and on all contracts, estimates and proposals.

#### How to Register:

WEBSITE: www.attorneygeneral.gov

**PHONE:** (717) 772-2425

DEP will be checking for this required registration during our radon mitigation office inspections.



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

### SECTION 2 RADON CERTIFICATION APPLICATION

### 2.1 RADON CERTIFICATION APPLICATION INSTRUCTIONS

Applicants must submit a correct and complete application including all required fees. (See Section 1.1.12.)

**Step 1** Determine the type of certification you need.

The three types of certification are:

- 1) **Testing –** this certification is required for any of the following:
  - Placing and retrieving any radon testing device.
  - Analysis of the tester's own continuous radon monitors or electret ion chambers.
- 2) Mitigation this certification is required for any repair or altering of a building or building design for the purpose, in whole or in part, of reducing the concentration of radon in the indoor atmosphere.
- 3) **Laboratory –** this certification is required for any person who analyzes radon devices received from the public or from certified testers.
- **Step 2** Determine the category of certification.

The three types of certification (testing, mitigation and laboratory) are further divided into two categories:

#### 1) Individual Only Certification

- Under this category of certification, only the certified individual may perform the radon-related activity.
- Radon certification as an "individual" will result in only the given name of that individual being listed on the certificate and in DEP's Radon Services Directory.

#### 2) Firm Certification (Added to an Individual Certification)

- A certified individual may add a firm to that individual certification at any time. However, if for whatever reason, that certified individual is no longer in responsible charge of that radon-related activity for that firm, the firm certification lapses and is void until DEP-approves another individual to be in responsible charge of that firm.
- Certification as a "firm" results in the firm name, in addition to the certified individual's name, being listed on the certificate and in DEP's Radon Services Directory.
- In addition to the certified individual, the employees of the firm may also perform the radonrelated activities for which the firm is certified, if the following conditions are met:
  - Each employee must complete the appropriate employee application(s).
  - Documentation that the firm employee received initial training.
  - Each employee is listed with DEP, either by listing on the application or by written request to DEP signed by the firm's certified individual.
  - Each testing and/or mitigation firm employee must submit a photo taken within the last 3 months as a JPG file via email to <u>RA-EPRadon@pa.gov</u>. See Section 7 for guidelines.
  - All mitigation and laboratory employees are free. Each testing employee is \$150.
  - Each employee performs the radon-related activities under the responsible charge of that firm's certified individual.
  - ☐ Written approval for each firm employee and the required DEP identification card must be received from DEP prior to any employee commencing any radon-related activities in Pennsylvania. DEP-issued identification cards will be presented to a client upon request.

- **Step 3 If this is an initial application**, complete and compile the applicable checklist enclosed in this guide as Section 2.2.
  - CHECKLIST A Initial Testing Certification Application Checklist (See Section 2.2.1.)
  - CHECKLIST B Initial Mitigation Certification Application Checklist (See Section 2.2.2.)
  - CHECKLIST C Initial Laboratory Certification Application Checklist (See Section 2.2.3.)

**If this is a renewal application**, complete and compile the applicable checklist enclosed in this guide as Section 2.3.

CHECKLIST DRenewal Testing Certification Application Checklist (See Section 2.3.1.)CHECKLIST ERenewal Mitigation Certification Application Checklist (See Section 2.3.2.)CHECKLIST FRenewal Laboratory Certification Application Checklist (See Sections 2.3.3.)

**Step 4** Mail your completed application, including a check or money order payable to the "Commonwealth of Pennsylvania" for the total amount of applicable fees, to:

Department of Environmental Protection (DEP) Bureau of Radiation Protection, Radon Division P.O. Box 8469 Harrisburg, PA 17105-8469

(<u>Note</u>: Radon-related activities applied for in this application may not begin until you have received a DEP certification certificate for that radon-related activity.)

**Step 5** After review of the application, DEP will either certify, deny, or send a 20-day correction letter to the applicant.

If a reply is not received to the correction letter within 20 days of the date of that letter, a 10-day intent to deny letter is sent. If the intent to deny letter is not answered within 10 days, the application is denied, and a denial letter is sent.

#### For any questions about this application or radon certification, please call the Radon Certification Section of the Department of Environmental Protection at (717) 783-3594.

- **Step 6** DEP may require additional information related to an applicant's qualifications or technical or administrative information related to radon testing, mitigation or laboratory analysis of radon samples. If so, a written request will be sent.
- **Step 7** Notification of Change

It is the certified individual's responsibility to notify DEP of the occurrence of any changes which may affect their certification within 10 business days. All notification of changes must be made in writing and bear the signature of the certified Individual. Changes may be sent by postal mail, fax or by e-mailing a PDF of the scanned document.

2900-FM-BRP0010b Rev. 10/2022 Initial Testing Checklist



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

## 2.2 INITIAL CERTIFICATION CHECKLISTS 2.2.1 CHECKLIST A

### INITIAL TESTING CERTIFICATION APPLICATION CHECKLIST FOR: Testing Individual Certification Only OR Testing Individual with Firm Certification Added

#### Submit the items below in the order listed:

- A person may not provide radon-related services without current DEP-certification.
- If applicable, any testing individual certification application postmarked greater than one year after the expiration of the previous testing individual certification shall be submitted as an initial testing individual application and is not subject to the \$150 late application fee.

#### **Radon Certification Application**

Submit a complete and accurate application, Section 2.4 General Section. Include a check or money order payable to the "Commonwealth of Pennsylvania" for applicable fees. (See Section 1.1.12.)

#### Compliance Information

If applicable, submit all radon-related noncompliance information, including descriptions of notices of violation, administrative orders, civil penalties assessments and actions for violations of the Radon Certification Act, and the subsequent Chapter 240 Radon Certification Regulations.

#### DEP-approved Course Certificate

DEP accepts all NRPP- or NRSB-approved Initial Radon Measurement Courses. Approved courses do not expire.

#### DEP-approved Exam Results

Submit proof of having passed a DEP-approved radon measurement exam for the certified individual applicant. The certified individual applicant must have passed the exam within two years of the postmark date of the individual's applicant submittal. This exam is an **initial** requirement only. For DEP-approved exams see Section 4.1.

#### I.D. Card Photographs for the Certified Testing Individual

Submit a photo taken within the last 3 months as a JPG file via email to <u>RA-EPRadon@pa.gov</u>. See Section 7 for guidelines.

#### Certified Testing Individual Acknowledgment Form

Complete and submit the form in Section 2.4.1.

#### Quality Assurance Plan

Please contact the Radon Certification Section for a copy of a DEP-approved quality assurance plan or refer to Section 5 for information on compiling this document. All primary testers see Section 1.7 QA Requirements for Primary Testers.

#### Client Information

Submit a copy of the document containing the 'Notice of Clients' you will provide to the client prior to providing a radon-related service. (The text of the 'Notice to Clients' is found in §240.302). Also, submit a copy of the radon test result reporting form you will provide the client, containing the "Notice to Clients." DEP's required items for the radon test result reporting form to clients is found in Section 3.5. Submit copies of price lists, brochures, and advertisements, as applicable.

#### Certified Individual Testing Fee

Submit \$525 for the certified individual testing fee.

#### PRIMARY DEVICES

If applying as a primary tester for the same manufacturer of Continuous Radon Monitor(s) (CRMs), complete and submit:

- The 2.4.4 Continuous Radon Monitor (CRM) Form.
- Proof of calibration for all serial numbers.
- The 2.4.6 QA Form for CRM Primary Testing and/or Laboratory.
- \$150 primary device fee for each manufacturer. (See Section 1.1.12.)
- Proof of device proficiency. (See below).

If applying as a primary tester for the same manufacturer of Electret Reader, complete and submit:

- The 2.4.5 Electret Reader Form.
- Proof of calibration for all electret readers and reference electrets.
- The 2.4.7 QA Form for Electret Ion Chamber Primary Testing and/or Laboratory.
- \$150 primary device fee for each manufacturer. (See Section 1.1.12.)
- Proof of Device Proficiency. (See below).
- Device Proficiency must have been completed within the past 2 years. Submitting proof of device proficiency is only required if reading/analyzing CRMs or electret ion chambers. Separate proficiency is required for <u>each</u> <u>model</u> of CRM (e.g. Sun Radon 1027, 1028, 1028XP, 1030; RadStar RS300, RS800; etc.), or electret reader (e.g. Rad Elec E-Perm, SPER-1; RA-Dome Electret; etc.).

Renewal certification applicants are not required to repeat this initial device proficiency requirement as long as the required QA/QC program is maintained, and the same device model continues to be listed on a certification. The following chambers are DEP approved for device proficiency:

Bowser-Morner, Inc. 4514 Taylorsville Road Dayton, OH 45424 Phone: (937) 236-8805 Fax: (937) 233-2024 www.bowser-morner.com TCS Industries Inc. 4326 Crestview Road Harrisburg, PA 17112 Phone: (717) 657-7032 Email: <u>radondetek@comcast.net</u> www.radondetek.com KSU Radon Chamber 2323 Anderson Avenue, Suite 300 Manhattan, KS 66502 Phone: (785) 532-6026 Email: <u>radonchamber@ksu.edu</u> www.ksuradonchamber.org

#### If ONLY applying for a Testing Individual Certification, STOP HERE.

(For mailing instructions and review time frames please refer to the end of this checklist.)

If applying for a Testing Individual Certification with a Testing <u>FIRM</u> Certification added, also submit the following:

#### Employee Information

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- List each firm employee(s) who will be performing radon testing activities on the Radon Certification Application, Section 2.4 General Section.
- Submit documentation that the firm employee received initial training pursuant to § 240.102(b)(6).

#### I.D. Card Photographs for Each Testing Firm Employee

Submit a photo taken within the last 3 months for each testing firm employee as a JPG file via email to <u>RA-EPRadon@pa.gov</u>. See Section 7 for photograph guidelines. ID badges shall be presented to a client upon request.

#### Radon Testing Employee Application

Each testing firm employee must complete and submit this application. (See Section 2.9.)

- Testing Firm Ownership Form
   (See Section 2.12.)
- Testing Employee Fee

Submit \$150 for each testing firm employee.

### **Testing Firm Certification Fee**

Submit \$1,050 for the testing firm certification fee.

#### Mail your completed initial application to:

Department of Environmental Protection (DEP) Bureau of Radiation Protection, Radon Division P.O. Box 8469 Harrisburg, PA 17105-8469

#### Time frame for reviewing applications

After review of the application - approximately two weeks - DEP will either certify, deny, or send a 20-day correction letter.

If a reply is not received to the correction letter within 20 days of the date of that letter, a 10-day intent to deny letter is sent. If the intent to deny letter is not answered within 10 days, the application is denied, and a denial letter is sent.

DEP may require additional information to an applicant's qualifications, or technical or administrative information related to radon testing. If so, a written request will be sent.

#### Notification of any changes

It is the certified individual's responsibility to notify DEP within 10 business days of the occurrence of any changes which may affect their certification. All notifications of changes must be made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax, or by emailing a PDF of the scanned document.

For any questions about this application or radon certification, please call the Radon Certification Section of the Department of Environmental Protection at (717) 783-3594.

#### ALL FEES ARE NONREFUNDABLE!



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

### 2.2.2 CHECKLIST B INITIAL MITIGATION CERTIFICATION APPLICATION CHECKLIST FOR: Mitigation Individual Certification Only OR Mitigation Individual Certification with Mitigation Firm Certification Added

#### Submit the items below in the order listed:

- A person may not provide radon-related services without current DEP-certification.
- If applicable, any mitigation individual certification application postmarked greater than one year after the expiration of the previous mitigation individual certification shall submit as an initial mitigation individual application and is not subject to the \$150 late application fee.

#### Radon Certification Application

Submit a complete and accurate application, Section 2.4 General Section. Include check or money order payable to the "Commonwealth of Pennsylvania" for applicable fees. (See Section 1.1.12.)

#### Compliance Information

If applicable, submit all radon-related noncompliance information, including descriptions of notices of violation, administrative orders, civil penalty assessments and actions for violations of the Radon Certification Act, and the subsequent Chapter 240 Radon Certification regulations.

#### DEP-approved Course Certificate

DEP accepts all NRPP or NRSB-approved Initial Radon Mitigation Courses. Approved courses do not expire.

#### DEP-approved Exam Results

Submit proof of having passed a DEP-approved radon mitigation exam for the certified individual applicant. The certified individual applicant must have passed the exam within two years of the postmark date of the individual's applicant submittal. This exam is an **initial** requirement only. For DEP-approved exams, see Section 4.1.

#### Experience

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Submit a description of:

• at least one year of professional radon mitigation system installation experience as a DEP-listed mitigation firm employee, or a certified individual from another state or country

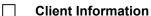
#### OR

• three years' experience in architecture, engineering, electrical contracting, plumbing, carpentry, masonry, or related trades.

If you have any questions about your experience, please submit a detailed written explanation of that experience for approval prior to submittal of this application. All fees submitted are nonrefundable.

 I.D. Card Photographs for the Certified Mitigation Individual Submit a photo taken within the last 3 months as a JPG file via email to <u>RA-EPRadon@pa.gov</u>. See Section 7 for guidelines.
 Certified Mitigation Individual Acknowledgment Form Submit completed form in Section 2.4.2.
 Mitigation Worker Health and Safety Plan Submit completed form in Section 2.5.

- **Radon Mitigation Standards Agreement** Submit completed form in Section 2.7.
- **Election of Post-Mitigation Testing Options Form** Complete and submit the form in Section 2.8.



Submit a copy of the document containing the "Notice to Clients" that will be provided to the client prior to providing a radon-related service. The 'Notice to Clients" is normally placed on the estimate form for the job. (The text of the 'Notice to Clients" is found in § 240.302.)

#### Radon Mitigation System Package Information

Submit a copy of the following information that is to be securely attached to every installed system:

- Copy of contracts and warranties for the mitigation system.
- Description of the installed mitigation system and its basic operating principles.
- List of appropriate actions for the client to take if the warning device indicates system failure.
- Recommendation to retest every two years.
- Recommendation to have an electrical inspection performed on applicable components of the installed system.

#### Certified Individual Mitigation Fee

Submit \$450 for the certified individual mitigation fee.

#### If ONLY applying for Mitigation Individual Certification, STOP HERE.

(For mailing instructions and review time frames please refer to the end of this checklist.)

## If applying for Individual Mitigation Certification with Mitigation <u>FIRM</u> Certification also submit the following:

#### Employee Information

- List each firm employee(s) who will be performing radon mitigation activities on the Radon Certification Application, Section 2.4 General Section.
- Submit documentation that the firm employee receive initial training pursuant to § 240.112(b)(6).

#### I.D. Card Photographs for Each Mitigation Firm Employee

Submit a photo taken within the last 3 months for each mitigation firm employee as a JPG file via email to <u>RA-EPRadon@pa.gov</u>. See Section 7 for guidelines. ID badges shall be presented to a client upon request.

#### Radon Mitigation Employee Application

Each mitigation firm employee must complete and submit this application. See Section 2.10.

- Mitigation Firm Ownership Form See Section 2.13.
  - Mitigation Firm Certificate Fee

Submit \$1050 for the mitigation firm certification fee.

#### Mail your completed initial application to:

Department of Environmental Protection (DEP) Bureau of Radiation Protection, Radon Division P.O. Box 8469 Harrisburg, PA 17105-8469

#### Time frame for reviewing applications

After review of the application - approximately two weeks - DEP will either certify, deny, or send a 20-day correction letter.

If a reply is not received to the correction letter within 20 days of the date of that letter, a 10-day intent to deny letter is sent. If the intent to deny letter is not answered within 10 days, the application is denied, and a denial letter is sent.

DEP may require additional information to an applicant's qualifications or technical or administrative information related to radon mitigation. If so, a written request will be sent.



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#### Notification of any changes

It is the certified individual's responsibility to notify DEP within 10 business days of the occurrence of any changes which may affect their certification. All notifications of changes must be made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax, or by emailing a PDF of the scanned document.

For any questions about this application or radon certification, please call the Radon Certification Section of the Department of Environmental Protection at (717) 783-3594.

#### ALL FEES ARE NONREFUNDABLE!



#### 2.2.3 CHECKLIST C

#### INITIAL LABORATORY CERTIFICATION APPLICATION CHECKLIST FOR: Laboratory Individual Certification Only OR Laboratory Individual Certification with Firm Certification Added

#### Submit the items below in the order listed:

- A person may not provide radon-related services without current DEP-certification.
- If applicable, any laboratory individual certification application postmarked greater than one year after the expiration of the previous laboratory individual certification shall be submitted as an initial laboratory individual application and is not subject to the \$150 late application fee.

#### **Radon Certification Application**

Submit a complete and accurate application, Section 2.4 General Section. Include check or money order payable to the "Commonwealth of Pennsylvania" for applicable fees. (See Section 1.1.12.)

#### Compliance Information

If applicable, submit all radon-related noncompliance information, including descriptions of notices of violation, administrative orders, civil penalty assessments and actions for violations of the Radon Certification Act, and the subsequent Chapter 240 Radon Certification Regulations.

#### **DEP-approved Course Certificate**

DEP accepts all NRPP- or NRSB-approved initial radon measurement courses. Approved courses do not expire.

#### **Education**

Submit a copy of proof of a bachelor's degree in the physical sciences, engineering, or related fields -OR- the education or professional work experience equivalent to a degree as determined by DEP. (A copy of transcripts and diploma must be attached.)

#### **Experience**

Submit a description of at least one year of professional experience in performing laboratory analysis of radon measurement devices or samples **-OR-** certification in health physics by the American Board of Health Physics (ABHP).

#### Certified Laboratory Individual Acknowledgment Form

Submit the completed form in Section 2.4.3.

#### **Quality Assurance Plan**

Please refer to Section 5 for information on compiling this document.

#### Client Information

Submit a copy of the document containing the 'Notice to Clients' you will provide to the client prior to providing a radon related service. (The text of the 'Notice to Clients' is found in §240.302.) Also, submit a copy of the radon test result reporting form that will be provided the client, containing the 'Notice to Clients'. DEP's required items for the radon test result reporting form to clients is found in Section 3.5. Submit copies of price lists, brochures, and advertisements, as applicable.

#### Certified Individual Laboratory Fee

Submit \$600 for the certified individual laboratory fee.

## ☐ If applying as a Laboratory for the same manufacturer of Continuous Radon Monitor (CRM), complete and submit:

	The	2.	4.4	Cor	ntinu	ous	Radon	Monitor	(CR	RM) Form.	
	_	-	-			-					

- Proof of calibration for each serial-numbered CRMs.
- The 2.4.6 QA Form for Continuous Radon Monitor Primary Testing and/or Laboratory.
  - Proof of device proficiency (see below).

#### If applying as a Laboratory for the same manufacturer of Electret Reader, complete and submit:



- The 2.4.5 *Electret Reader Form*.
- Proof of calibration and the reference electrets for all electret readers.
- The 2.4.7 QA Form for Electret Ion Chamber Primary Testing and/or Laboratory.
- Proof of device proficiency (see below).

Device Proficiency must have been completed within the past 2 years. This is required for any device the applicant  $\square$ intends on analyzing, including activated charcoal, liquid scintillation, and alpha tracks. Separate proficiency is required for each model of CRM (e.g. Sun Radon 1027, 1028, 1028XP, 1030; RadStar RS300, RS800; etc.), or electret reader (e.g. Rad Elec E-Perm, SPER-1; RA-Dome Electret; etc.).

Renewal certification applicants are not required to repeat this initial device proficiency requirement as long as the required QA/QC program is maintained, and the same device model continues to be listed on a certification. The following chambers are DEP-approved for device proficiency:

Bowser-Morner, Inc. 4514 Taylorsville Road Dayton, OH 45424 Phone: (937) 236-8805 Fax: (937) 233-2024 www.bowser-morner.com

TCS Industries Inc. 4326 Crestview Road Harrisburg, PA 17112 Phone: (717) 657-7032 Email: radondetek@comcast.net Email: radonchamber@ksu.edu www.radondetek.com

KSU Radon Chamber 2323 Anderson Avenue, Suite 300 Manhattan, KS 66502 Phone: (785) 532-6026 www.ksuradonchamber.org



 $\square$ 

#### If ONLY applying for a Laboratory Individual Certification, STOP HERE.

(For mailing instructions and review time frames please refer to the end of this checklist)

#### If applying for Laboratory Individual Certification with Laboratory FIRM Certification added, also submit the following:

#### $\square$ **Employee Information**

- List each firm employee(s) who will be performing radon laboratory activities on the Radon Certification Application, Section 2.4 General Section.
- Submit documentation that the firm employee received initial training pursuant to § 240.122(b)(6).

#### **Radon Laboratory Employee Application**

Each laboratory firm employee must complete and submit this application. See Section 2.11.



See Section 2.14.

#### Laboratory Firm Certification Fee

Submit \$1,125 for the laboratory firm certification fee.

#### Mail your completed initial application to:

Department of Environmental Protection (DEP) Bureau of Radiation Protection, Radon Division P.O. Box 8469 Harrisburg, PA 17105-8469

#### Time frame for reviewing applications

After review of the application - approximately two weeks - DEP will either certify, deny, or send a 20-day correction letter.

If a reply is not received to the correction letter within 20 days of the date of that letter, a 10-day intent to deny letter is sent. If the intent to deny letter is not answered within 10 days, the application is denied, and a denial letter is sent.

DEP may require additional information to an applicant's gualifications, or technical or administrative information related to laboratory analysis of radon samples. If so, a written request will be sent.

#### Notification of any changes

It is the certified individual's responsibility to notify DEP within 10 business days of the occurrence of any changes which may affect their certification. All notifications of changes must be made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax, or by emailing a PDF of their scanned document.

For any questions about this application or radon certification, please call the Radon Certification Section of the Department of Environmental Protection at (717) 783-3594.

#### ALL FEES ARE NONREFUNDABLE!

2900-FM-BRP0010b Rev. 10/2022 Renewal Certification Application Testing Instructions pennsylvania



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

#### 2.3 RENEWAL CERTIFICATION CHECKLISTS

### 2.3.1 CHECKLIST D RENEWAL OF TESTING CERTIFICATION APPLICATION CHECKLIST

If you are renewing your:

- Testing individual certification only, submit items in Section A.
- Testing individual and testing firm certifications, submit items in Sections A and B.
- Testing firm certification <u>only</u>, submit items in Section C. (This option is only available if you have a current DEP-certified testing individual who will be in responsible charge of this firm certification.)

#### Section A: If applying for renewal of a Testing Individual certification submit the following:

#### Radon Certification Application

Submit a completed and accurate application, Section 2.4 General Section. Include a check or money order payable to the "Commonwealth of Pennsylvania" for applicable fees. (See Section 1.1.12.)

#### Compliance Information

If applicable, submit all radon-related noncompliance information, including descriptions of notices of violation, administrative orders, civil penalty assessments and actions for violations of the Radon Certification Act, and the subsequent Chapter 240 Radon Certification Regulations.

#### Continuing Education

Submit proof of having completed 16 hours of NRPP- or NRSB-approved continuing education - **OR** - of having passed a DEP-approved exam during the previous two-year certification cycle.

#### I.D. Card Photographs for the Certified Testing Individual

Submit a photo taken within the last 3 months as a JPG file via email to <u>RA-EPRadon@pa.gov</u>. See Section 7 for guidelines.

#### Certified Testing Individual Acknowledgment Form

Submit completed form in Section 2.4.1.

#### **Quality Assurance Plan**

If your QA plan has been modified since your previous radon certification application approval, please submit the new plan. If no changes have been made, please submit a signed and dated document, such as the QA plan signature page or cover page, confirming your acknowledgement of the QA requirements.

#### Client Information

 $\square$ 

Submit a copy of the radon test result reporting form you will provide a client, containing the 'Notice to Clients'. DEP's required items for the radon test result reporting form to clients is found in Section 3.5.

## If renewing as a Primary Tester for Continuous Radon Monitors (CRM) of the same manufacturer as listed on your previous certification, complete and submit:

(If adding or removing a new type or manufacturer of device from your previous certification, see Section 1.2 for guidance on what must be submitted.)

- The 2.4.4 Continuous Radon Monitor (CRM) Form.
- Proof of calibration for all serial-numbers for the previous two-year certification cycle.
- The 2.4.6 QA Form for Continuous Radon Monitor Primary Testing and/or Laboratory.
- \$150 primary device fee for each manufacturer. (See Section 1.1.12.)

## If renewing as a Primary Tester for Electrets of the same manufacturer as listed on your previous certification, complete and submit:

(If adding or removing any new type or manufacturer of device from your previous certification, see Section 1.2 for guidance on what must be submitted.)

- The 2.4.5 *Electret Reader Form*.
- Proof of calibration for electret reader(s) and reference electrets for the previous two years.
- The 2.4.7 QA Form for all Electret Ion Chamber Primary Testing and/or Laboratory.
- \$150 primary device fee for each manufacturer. (See Section 1.1.12.)

#### Certified Individual Testing Fee

Submit \$525 for the certified individual testing fee.



#### If ONLY applying for renewal of a Testing Individual Certification, STOP HERE.

(For mailing instructions and review time frames please refer to Section D below.)

## <u>Section B</u>: If applying for BOTH a Testing Individual and Testing <u>FIRM</u> Certification, also submit the following:

#### Employee Information

- List each firm employee(s) who will be performing radon testing activities on the Radon Certification Application, Section 2.4 General Section.
- Submit documentation that each firm employee received continuing education pursuant to § 240.102(b)(7).

#### I.D. Card Photograph for Each Testing Firm Employee

Submit a photo taken within the last 3 months for each testing firm employee as a JPG file via email to <u>RA-EPRadon@pa.gov</u>. See Section 7 for guidelines. ID badges shall be presented to a client upon request.

#### Radon Testing Employee Application

Each testing firm employee must complete and submit this application. See Section 2.9.

**Testing Firm Ownership Form** See Section 2.12.

#### Testing Employee Fee

Submit \$150 for each testing firm employee.

Testing Firm Certification Fee

Submit \$1050 for the testing firm certification fee.

## <u>Section C</u>: If applying ONLY for Testing <u>FIRM</u> Certification, submit everything listed above in Section B and also the following:

## (This option is only available if you have a current DEP-certified testing individual who will be in responsible charge of this firm certification)

Radon Certification Application

Submit a complete and accurate application, Section 2.4 General Section.

Certified Testing Individual Acknowledgment Form

Submit completed form in Section 2.4.1.

#### Section D: General Application Information

 Mail your completed renewal application to: Department of Environmental Protection (DEP) Bureau of Radiation Protection, Radon Division P.O. Box 8469 Harrisburg, PA 17105-8469

#### • Late Application Fee

Applicable to Testing Individual Certification Applications ONLY:

- A renewal application postmarked after the previous individual certification expiration date shall include a \$150 late application fee. These applicants should complete this checklist, 2.3.1 Checklist D, Renewal of Testing Certification Application Checklist.
- A renewal application postmarked more than one year after the expiration of that certification shall be an initial application and is not subject to the \$150 late application fee. However, shall be subject to the fees included on the checklist. These applicants should complete 2.2.1 Checklist A, Initial Testing Certification Application Checklist.
- In order to avoid a lapse in certification and the late application fee, applicants for certification renewal should file their application a minimum of 30 days prior to the expiration of their current certification.
- Submitting a renewal application does not extend the previous certification.
- A person may not provide radon-related services without current certification.
- Time frame for Reviewing Applications

After review of the application - approximately two weeks - DEP will either certify, deny, or send a 20-day correction letter.

If a reply is not received to the correction letter within 20 days of the date of that letter, a 10-day intent to deny letter is sent. If the intent to deny letter is not answered within 10 days, the application is denied, and a denial letter is sent.

DEP may require additional information to an applicant's qualifications, or technical or administrative information related to radon testing. If so, a written request will be sent.

#### • Notification of Any Changes

It is the certified individual's responsibility to notify DEP within 10 business days of the occurrence of any changes which may affect their certification. All notifications of changes must be made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax, or by emailing a PDF of the scanned document.

For any questions about this application or radon certification, please call the Radon Certification Section of the Department of Environmental Protection at (717) 783-3594.

#### ALL FEES ARE NONREFUNDABLE!

2900-FM-BRP0010b Rev. 10/2022 Renewal Certification Application Mitigation Instructions



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

#### 2.3.2 CHECKLIST E RENEWAL OF MITIGATION CERTIFICATION APPLICATION CHECKLIST

If you are renewing your:

- Mitigation individual certification only, submit items in Section A.
- Mitigation individual and mitigation firm certifications, submit items in Sections A and B.
- Mitigation firm certification <u>only</u>, submit items in Section C (This option is only available if you have a current DEP-certified mitigation individual who will be in responsible charge of this firm certification).

#### Section A: If applying for renewal of a Mitigation Individual Certification submit the following:

#### **Radon Certification Application** Submit a complete and accurate application, Section 2.4 General Section. Include a check or money order payable to the "Commonwealth of Pennsylvania" for applicable fees. (See Section 1.1.12). **Compliance Information** If applicable, submit all radon-related noncompliance information, including descriptions of notices of violation, administrative orders, civil penalty assessments and actions for violations of the Radon Certification Act, and the subsequent Chapter 240 Radon Certification Regulations. **Continuing Education** Submit proof of having completed 16 hours of NRPP or NRSB-approved continuing education - OR - of having passed a DEP-approved exam during the previous two-year certification cycle. $\square$ I.D. Card Photographs for the Certified Testing Individual Submit a photo taken within the last 3 months as a JPG file via email to RA-EPRadon@pa.gov. See Section 7 for guidelines. **Certified Mitigation Individual Acknowledgment Form** 1 1 Submit the completed form in Section 2.4.2. Workers, Health and Safety Program Submit the completed form in Section 2.5. **Radon Mitigation Standards Agreement** Submit the completed form in Section 2.7. **Election of Post-Mitigation Testing Options Form** Submit the completed form in Section 2.8. **Client Information** Submit a copy of the document containing the 'Notice to Clients' that will be provided to the client prior to providing a radon-related service. The "Notice to Clients" is normally placed on the estimate form for the job. (The text of the 'Notice to Clients' is found in § 240.302.) $\square$ **Radon Mitigation System Package Information** Submit a copy of the following information that is to be securely attached to every installed system: Copy of contracts and warranties for the mitigation system. Description of the installed mitigation system and its basic operating principles. List of appropriate actions for the client to take if the warning device indicates system failure. Recommendation to retest every two years. Recommendation to have an electrical inspection performed on applicable components of the installed system. $\square$ **Certified Individual Mitigation Fee** Submit \$450 for the certified individual mitigation fee.



#### If ONLY applying for renewal of a Mitigation Individual Certification, STOP HERE.

(For mailing instructions and review time frames please refer to Section D below)

<u>Sec</u>	<u>ction B</u> : If applying for renewal of BOTH a Mitigation Individual and <u>FIRM</u> Certification also submit the following:
	Employee Information
	<ul> <li>List each firm employee who will be performing radon mitigation activities on the Radon Certification Application, Section 2.4 General Section.</li> </ul>
	<ul> <li>Submit documentation that each firm employee received continuing education pursuant to § 240.112(b)(7).</li> </ul>
	I.D. Card Photographs for Each Mitigation Firm Employee
	Submit a photo taken within the last 3 months for each mitigation firm employee as a JPG file via email to <u>RA-EPRadon@pa.gov</u> . See Section 7 for guidelines. ID badges shall be presented to a client upon request.
	Radon Mitigation Employee Application
	Each mitigation firm employee must complete and submit this application. See Section 2.10.
	Mitigation Firm Ownership Form
_	See Section 2.13.
	Mitigation Firm Certification Fee
	Submit \$1050 for the mitigation firm certification fee.
<u>Sec</u>	<u>ction C</u> : If applying ONLY for Mitigation <u>FIRM</u> Certification, submit everything listed above in Section B and also the following:
	(This option is only available if you have a current DEP-certified mitigation individual who will be in
	responsible charge of this firm certification.)
	Radon Certification Application
	Submit a complete and accurate application, Section 2.4 General Section.
	Certified Mitigation Individual Acknowledgment Form
	Complete and submit the form in Section 2.4.2.
<u>Sec</u>	tion D: General Application Information
•	Mail your completed renewal application to:
	Department of Environmental Protection (DEP)
	Bureau of Radiation Protection, Radon Division
	P.O. Box 8469
	Harrisburg, PA 17105-8469
•	Late Application Fee
	Applicable to Mitigation Individual Certification Applications ONLY:
	A renewal application postmarked after the previous individual certification expiration date shall include a \$150 late application fee. These applicants should complete this checklist, 2.3.2 Checklist E, Renewal of Mitigation Certification Application Checklist.
	A renewal application postmarked more than one year after expiration of that certification shall be an initial application and is not subject to the \$150 late application fee. However, shall be subject to the fees included on the checklist. These applicants should complete 2.2.2 Checklist B, Initial Mitigation Certification Application Checklist.
•	In order to avoid a lapse in certification and the late application fee, applicants for certification renewal should file their application a minimum of 30 days prior to the expiration of their current certification.
•	Submitting a renewal application does not extend the previous certification.
•	A person may not provide radon-related services without current certification.

#### • Time Frame for Review of Applications

After review of the application - approximately two weeks - DEP will either certify, deny or send a 20-day correction letter.

If a reply is not received to the correction letter within 20 days of the date of that letter, a 10-day intent to deny letter is sent. If the intent to deny letter is not answered within 10 days, the application is denied, and a denial letter is sent.

DEP may require additional information to an applicant's qualifications, or technical or administrative information related to radon mitigation. If so, a written request will be sent.

#### • Notification of Changes to a Certification

It is the certified individual's responsibility to notify DEP within 10 business days of the occurrence of any changes which may affect their certification. All notifications of changes must be made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax, or by emailing a PDF of your scanned document.

For any questions about this application or radon certification, please call the Radon Certification Section of the Department of Environmental Protection at (717) 783-3594.

## ALL FEES ARE NONREFUNDABLE!

2900-FM-BRP0010b Rev. 11/2022 Renewal Certification Application Laboratory Instructions pennsylvania DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

### 2.3.3 CHECKLIST F

#### **RENEWAL OF LABORATORY CERTIFICATION APPLICATION CHECKLIST**

If you are renewing your:

- Laboratory individual certification only, submit items in Section A.
- Laboratory individual and laboratory firm certifications, submit items in Sections A and B.
- Laboratory firm certification <u>only</u>, submit items in Section C. (This option is only available if you have a current DEP-certified laboratory individual who will be in responsible charge of this firm certification.)

#### Section A: If applying for renewal of a Laboratory Individual certification submit the following:

#### Radon Certification Application

Submit a complete and accurate application, Section 2.4 General Section. Include a check or money order payable to the "Commonwealth of Pennsylvania" for applicable fees. (See Section 1.1.12.)

#### Compliance Information

If applicable, submit all radon-related noncompliance information, including descriptions of notices of violation, administrative orders, civil penalty assessments and actions for violations of the Radon Certification Act, and the subsequent Chapter 240 Radon Certification Regulations.

#### Continuing Education

Submit proof of having completed 16 hours of NRPP- or NRSB-approved continuing education - OR - of having passed a DEP-approved exam during the previous two-year certification cycle.

#### Certified Laboratory Individual Acknowledgment Form

Complete and submit the form in Section 2.4.3.

#### **Quality Assurance Plan**

If your QA plan has been modified since your previous radon certification application approval, please submit the new plan. If no changes have been made, please submit a signed and dated document, such as the QA plan signature page or cover page, confirming your acknowledgement of the QA requirements.

#### Client Information

 $\square$ 

Submit a copy of the radon test result reporting form you will provide a client, containing the 'Notice to Clients'. DEP's required items for the radon test result reporting form to clients is found in Section 3.5.

## If renewing as a Laboratory for Continuous Radon Monitors (CRM) of the same manufacturer as listed on your previous certification, complete and submit:

(If adding or removing any new type or manufacturer of device from your previous certification, see Section 1.2 for guidance on what must be submitted.)

- The 2.4.4 Continuous Radon Monitor (CRM) Form.
- Proof of calibration for all serial-numbers for the previous two-year certification cycle.

The 2.4.6 QA Form for Continuous Radon Monitor Primary Testing and/or Laboratory.

## If renewing as a Laboratory for Electrets of the same manufacturer as listed on your previous certification, complete and submit:

(If adding or removing any new type or manufacturer of device from your previous certification, see Section 1.2 for guidance on what must be submitted.)

- The 2.4.5 *Electret Reader Form*.
- Proof of calibration for all electret reader(s) and reference electrets for the previous two-year certification cycle.
- The 2.4.7 QA Form for Electret Ion Chamber Primary Testing and/or Laboratory.

#### Certified Individual Laboratory Fee

Submit \$600 for the certified individual laboratory fee.



If ONLY Applying for Renewal of a Laboratory Individual Certification STOP HERE.

(For mailing instructions and review time frames please refer to Section D below.)

<u>Section B</u> : If applying for BOTH a laboratory individual and laboratory <u>FIRM</u> certification, also submit the following:
Employee Information
<ul> <li>List each firm employee(s) who will be performing radon laboratory activities on the Radon Certification Application, Section 2.4 General Section.</li> </ul>
<ul> <li>Submit documentation that each firm employee received continuing education pursuant to § 240.122(b)(7).</li> </ul>
Radon Laboratory Employee Application
Each laboratory firm employee must complete and submit this application. See Section 2.11.
Laboratory Firm Ownership Form
See Section 2.14.
Laboratory Firm Certification Fee
Submit \$1125 for the laboratory firm certification fee.
<u>Section C</u> : If applying ONLY for laboratory <u>FIRM</u> certification, submit everything listed above in Section B <u>and</u> also the following:
(This option is only available if you have a current DEP-certified laboratory individual who will be in
responsible charge of this firm certification.)
Radon Certification Application
Submit a completed and accurate application, Section 2.4 General Section.
Certified Laboratory Individual Acknowledgment Form
Complete and submit the form in Section 2.4.3.
Section D: General Application Information
Mail your completed renewal application to:
Department of Environmental Protection (DEP)

Bureau of Radiation Protection, Radon Division P.O. Box 8469

Harrisburg, PA 17105-8469

#### • Late Application Fee:

Applicable to Laboratory Individual Certification Applications ONLY:

- A renewal application postmarked after the previous individual certification expiration date shall include a \$150 late application fee. These applicants should complete this checklist, 2.3.3 Checklist F, Renewal of Laboratory Certification Application Checklist.
- A renewal application postmarked more than one year after expiration of that certification shall be an initial application and is not subject to the \$150 late application fee. However, shall be subject to the fees included on the checklist. These applicants should complete 2.2.3 Checklist C, Initial Laboratory Certification Application Checklist.
- In order to avoid a lapse in certification and the late application fee, applicants for certification renewal should file their application a minimum of 30 days prior to the expiration of their current certification.
- Submitting a renewal application does not extend the previous certification.
- A person may not provide radon-related services without current certification.

#### • Time frame for reviewing applications

After review of the application - approximately two weeks - DEP will either certify, deny, or send a 20-day correction letter.

If a reply is not received to the correction letter within 20 days of the date of that letter, a 10-day intent to deny letter is sent. If the intent to deny letter is not answered within 10 days, the application is denied, and a denial letter is sent.

DEP may require additional information to an applicant's qualifications, or technical or administrative information related to laboratory analysis of radon samples. If so, a written request will be sent.

#### • Notification of Any Changes

It is the certified individual's responsibility to notify DEP within 10 business days of the occurrence of any changes which may affect their certification. All notifications of changes must be made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax, or by emailing a PDF of your scanned document.

#### For any questions about this application or radon certification, please call the Radon Certification Section of the Department of Environmental Protection at (717) 783-3594.

### ALL FEES ARE NONREFUNDABLE!



### RADON CERTIFICATION APPLICATION 2.4 GENERAL SECTION

**CERTIFICATION SELECTIONS and FEES** If applying for an Initial or Renewing an Existing Select any additions to your Initial, Renewal or Existing Individual Individual Certification, please select below. Certification below. **Testing Individual** Add Testing Firm \$1,050 \$525 Add Testing Firm Employee \$150 each Add Primary Fee for CRM \$150 Add Primary Fee for electrets \$150 Mitigation Individual \$450 Add Mitigation Firm \$1,050 Laboratory Individual \$600 Add Laboratory Firm \$1,125 Late Individual Application Fee \$150 (Required if an individual renewal application is postmarked after the expiration of the previous individual certification.) Enclose NONREFUNDABLE check or money order payable to the "Commonwealth of Pennsylvania" for the total amount required. (FOR DEP USE ONLY) CHECK/MONEY ORDER NUMBER: TOTAL:

### CONTACT INFORMATION: All information is required to be entered.

### (This information is published and is used for all DEP correspondence sent to the certified individual.)

Last Name (Certified Individual Applicant) First		st Name		Middle Name	Jr./etc.
Firm Name (If applying for firm certi your DEP certificate, otherwise enter		i name as y	ou want it to be on	Business Name	
your DEr Certificate, otherwise ente	a (N/A.)				
Business Mailing Address			Business Phone		
Business Mailing City		State	Zip Code	Secondary Phone (Cell or Home Pho	one)
	r				
County Business Website				Email Address	

### COMPLETE ONLY IF ABOVE ADDRESS IS A PO BOX

Business Physical Address:		
Business Physical City	State	ZIP Code

### EMPLOYEES: Complete for Firm certifications ONLY. (Add additional sheets as necessary.)

		Activity Per	formed by Employee	e(s) (Check one)
Full Name of Employee (Do Not List Certified Individuals)	DEP-Assigned Employee #	Testing	Mitigation	Laboratory

### RADON CERTIFICATION APPLICATION 2.4 GENERAL SECTION (continued)

Laboratory Device(s)	Chamber used for Spikes	Chamber Used for Calibrations	
Activated Charcoal			
Liquid Scintillation			
Alpha Track			
Continuous Radon Monitor			
Electret (Short-Term)			
Electret (Long-Term)			
Secondary Testing Device(s)	Chamber used for Spikes	Nama	DED Cartification Number of Laboratory
Secondary Testing Device(s) Activated Charcoal	Chamber used for Spikes	Name	/DEP Certification Number of Laboratory
Liquid Scintillation			
Alpha Track			
Continuous Radon Monitor			
Electret (Short-Term)			
Electret (Long-Term)			
	vices you place/retrieve <b>and</b> read/analyz	e)	Chamber Used for Calibrations
Continuous Radon Monitor	2.4.4 Continuous Radon Monitor (C Form	CRM)	
Working Level Monitor			
Electret (Short-Term)	2.4.5 Electret Reader Form		
Electret (Long-Term)	2.4.5 Electret Reader Form		
If applying for mitigation indivi	dual certification: Read and sign the s	tatement b	elow:
along with the DEP Radon Mitigation Active System Fee Form in Section 6, must be received by DEP no later than 10 busine days after the completion of the quarter in which the system was installed.         Printed Name of Mitigation       Signature of Mitigation Certified Individual         Date			
Check the appropriate stateme	ent below for ALL certification applica	tion(s) for	which this applies:
	and do not need to report via GreenPor		
	laboratory and/or mitigator and shall rep ut reporting via DEP's GreenPort see Se		P's GreenPort
Required Signature: (Read the	following carefully before you sign.)		
I certify that all statements made in this application, and any additions or changes to this application that I may make, are and be true and correct to the best of my knowledge, information, and belief. It is the certified individual's responsibility to notify I within 10 business days of the occurrence of any changes which may affect this certification. All notifications of changes must made in writing and bear the signature of the certified individual. Changes may be sent by postal mail, fax (717-783-8965), cemailing a PDF of the scanned document. I understand that I may not perform any radon-related activities in Pennsylv without a current DEP-Certification and that submitting an application for that specific activity in no way extends any previous expired radon certification.			certified individual's responsibility to notify DEP rtification. All notifications of changes must be sent by postal mail, fax (717-783-8965), or by n any radon-related activities in Pennsylvania
Printed Name of Certified Individual in Responsible Charge			
Signature of Certified Individ	lual in Responsible Charge	Date	



## 2.4.1 ACKNOWLEDGEMENT FORM FOR CERTIFIED INDIVIDUAL IN RESPONSIBLE CHARGE OF RADON TESTING ACTIVITIES

Individual's Name \_\_\_\_\_ Date \_\_\_\_\_

Firm's Name (if certified)

I am the certified individual in responsible charge of testing activities. I acknowledge that, as long as I am employed as the certified individual, I am responsible for compliance with Pennsylvania's radon certification regulations, 25 Pa. Code Chapter 240. My responsibilities include the following:

- 1. Supervising radon testing activities by ensuring that I will be in responsible charge of each DEP-listed testing firm employee.
- 2. Exercising due diligence to ensure that radon testing will be conducted as described in the approved application and in compliance with Pennsylvania law and regulations. (§ 240.310)
- 3. Exercising due diligence to ensure that all testing firm employees (a) have adequate training and knowledge of radon testing procedures, and (b) are listed with DEP as employees of a certified radon testing firm.
- 4. Exercising due diligence to ensure that all radon testing activities are conducted in accordance with the protocols set forth in § 240.310, and the following DEP-approved protocols. (All recommendations referenced in these documents are requirements and at a minimum the "lowest livable level" must be tested for any real estate transaction performed in Pennsylvania.):
  - ANSI/AARST MAMF-2017 Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings
  - EPA 402-R-92-014 Radon Measurement in Schools, July 1993
- 5. Exercising due diligence to ensure that all radon testing is performed in accordance with the quality assurance procedures set forth in the application and in § 240.604 for testers using primary devices, and § 240.605 for testers using secondary devices.
- 6. Exercising due diligence to ensure that DEP is provided written evidence of successful participation in the DEP-approved radon proficiency program for each primary radon measurement utilized. (§ 240.307)
- 7. Exercising due diligence to ensure that no testing is performed unless the potential client has first been provided the written information required by § 240.302(a), including a price list of services offered, a notice that only certified persons may provide such services, and evidence of certification.
- 8. Approving all data obtained from radon testing, including but not limited to, continuous working level (CW), continuous radon (CRM), and electret testing devices (EL and ES).
- 9. Exercising due diligence to ensure a radon-related service or product is not advertised with false or misleading statements regarding the services or products offered, health effects or property value. (§ 240.301)
- 10. Ensure participation in a continuing education program consisting of at least 16 hours of DEP-approved courses or seminars on radon or radon related topics each two-year certification cycle. (§ 240.306)
- 11. Ensure that DEP will be notified within 10 business days if a condition of the firm's certification or a condition of my certification changes. (§ 240.103(b))

## 2.4.1 ACKNOWLEDGEMENT FORM FOR CERTIFIED INDIVIDUAL IN RESPONSIBLE CHARGE OF RADON TESTING ACTIVITIES (continued)

Individual's Name \_\_\_\_\_ Date \_\_\_\_\_

Firm's Name (if certified)

- 12. Ensure that DEP will be notified within 5 business days if the firm loses its certified individual. (§ 240.102(b)(1))
- 13. Ensure that testing records are maintained for a minimum of 5 years:
  - Documentation of each radon test result, containing the items outlined in § 240.303(1)(i).
  - All quality assurance requirements and corrective actions shall be documented, and the records retained (including calibration records, QC measurements, QC charts, and QA reports). (§ 240.602(b))
- 14. Ensure that all primary device testing activities are reported to DEP within 45 days of the analysis date, or if no reportable testing activities are performed within a 45-day period that this is reported to DEP. (§ 240.303(1)) This includes all reportable testing activities performed by any of that firm's employees and submitted under the certified individual's testing certification number.
- 15. Ensure that the radon testing results are reported in writing to the client and the owner or occupant within 10 business days of the analysis date in accordance with the provisions of (§240.303(3)).
- 16. Ensure that each DEP-listed firm testing employee receives the required initial training and continuing education and that documentation of both the initial and continuing education are maintained for a minimum of 5 years. (§ 240.102(6) and (7))

Violation of my responsibilities as a certified individual could result in the suspension of my certification or my decertification, as well as civil and criminal penalties.

Name of Firm (if certified)

Print Name of Certified Individual

Signature of Certified Individual



## 2.4.2 ACKNOWLEDGEMENT FORM FOR CERTIFIED INDIVIDUAL IN RESPONSIBLE CHARGE OF RADON MITIGATION ACTIVITIES

Individual's Name \_\_\_\_\_

Date

Firm's Name (if certified)

I am the certified individual in responsible charge of mitigation activities. I acknowledge that, as long as I am employed as the certified individual, I am responsible for compliance with Pennsylvania's radon certification regulations, 25 Pa. Code Chapter 240. My responsibilities include the following:

- 1. Supervising radon mitigation activities by ensuring that I will be in responsible charge of each DEP-listed mitigation firm employee.
- 2. Exercising due diligence to ensure that radon mitigation will be conducted as described in the approved application and in compliance with Pennsylvania law, regulations and in accordance with DEP-approved mitigation standards. (§ 240.308)
- 3. Exercising due diligence to ensure that all mitigation firm employees (a) have adequate training and knowledge of radon mitigation procedures, and (b) are listed with DEP as employees of a certified radon mitigation firm.
- 4. Exercising due diligence to ensure that all noncertified individuals in the firm who perform radon mitigation conduct such activities in accordance with Pennsylvania law, regulations, DEP-approved mitigation standards, applicable statutes, ordinance and building codes. (§ 240.308)
- 5. Exercising due diligence to ensure that no mitigation is performed unless the potential client has first been provided with the written information required by § 240.302(a), including an estimate of the mitigation activities required to reduce radon concentrations, a notice that only certified persons may provide such services, and evidence of certification.
- 6. Exercising due diligence to ensure that the radon concentrations in mitigated buildings are determined and no sooner than 24 hours after completion of mitigation. §§ 240.303(4) and 240.310(a)(11).
- 7. Ensure that a thorough visual inspection is conducted of the building prior to initiating any radon mitigation work. (§ 240.308(a))
- 8. Exercising due diligence to ensure that the owner or occupant of the dwelling, following installation, is provided with a written warranty (if offered), description of the installed system, written instructions for properly checking and servicing the mitigation system, appropriate actions if the system fails, recommendation to retest every two years, and recommendation to have an electrical inspection performed. (§ 240.308(f))
- 9. Exercising due diligence to ensure that the health and safety program is adequate to maintain as low as reasonable achievable exposure to radon. (§ 240.305)
- 10. Exercising due diligence to ensure a radon-related service or product is not advertised with false or misleading statements regarding the services or products offered, health effects, or property value. (§ 240.301)
- 11. Ensure participation in a continuing education program consisting of at least 16 hours of DEP-approved courses or seminars on radon or radon-related topics each two-year certification cycle. (§ 240.306)
- 12. Ensure that DEP will be notified within 10 business days if a condition of the firm's certification or a condition of my certification changes. (§ 240.113(b))

## 2.4.2 ACKNOWLEDGEMENT FORM FOR CERTIFIED INDIVIDUAL IN RESPONSIBLE CHARGE OF RADON MITIGATION ACTIVITIES

Individual's Name	Date
Firm's Name (if certified)	

- 13. Ensure that DEP will be notified within 5 business days if the firm loses its certified individual. (§ 240.112(b)(1))
- 14. Ensure that the following records are maintained for a minimum of 5 years:
  - Documentation of each mitigation installation containing the items outlined in § 240.303(2)(i).
  - Records of each mitigator's exposure to radon during the course of employment. (§ 240.305)
- 15. Ensure that all mitigation reporting is submitted to DEP within 45 days after the date of installation or activation, **or** if no reportable mitigation activities are performed within a 45-day period that this is reported to DEP. (§ 240.303(2)). This includes that all reportable mitigation activities performed by any of that firm's employees are submitted under the certified individual's mitigation certification number.
- 16. Ensure that if the post-mitigation test is performed by the homeowner that the results are mailed directly from the certified laboratory to the homeowner. A copy may also be sent from the certified laboratory to the mitigator so that the mitigator may submit this result as part of their required 45-day reporting to DEP. (§ 240.2(a)(5)(i))
- 17. Ensure that the Radon Mitigation Active System Fee Form and, if applicable, a \$50 fee for every mitigation system installation or activation performed in Pennsylvania is received by DEP no later than 10 business days after the completion of the quarter in which the system was installed. (§ 240.309)
- 18. Ensure that each DEP-listed firm mitigation employee receives the required initial training and continuing education and that documentation of both the initial and continuing education are maintained for a minimum of five years. (§ 240.112(6) and (7))

Violation of my responsibilities as a certified individual could result in the suspension of my certification or my decertification, as well as civil and criminal penalties.

Name of Firm (if certified)

Print name of certified individual

Signature of certified individual



## 2.4.3 ACKNOWLEDGEMENT FORM FOR CERTIFIED INDIVIDUAL IN RESPONSIBLE CHARGE OF RADON LABORATORY ACTIVITIES

Individual's Name

Date \_\_\_\_\_

Firm's Name (if certified)

I am the certified individual in responsible charge of laboratory activities. I acknowledge that, as long as I am employed as the certified individual, I am responsible for the compliance with Pennsylvania's radon certification regulations, 25 Pa. Code Chapter 240. My responsibilities include the following:

- 1. Supervising radon laboratory activities by ensuring that I will be in responsible charge of each DEP-listed laboratory firm employee.
- 2. Exercising due diligence to ensure that radon laboratory activities will be conducted as described in the approved application and in compliance with Pennsylvania law and regulations.
- 3. Exercising due diligence to ensure that all radon laboratory activities are conducted in accordance with the protocols set forth in § 240.310, and the following DEP-approved protocols. (All recommendations referenced in these documents are requirements and, at a minimum, the "lowest livable level" must be tested for any real estate transaction performed in Pennsylvania.)
  - ANSI/AARST MAMF-2017 Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings
  - EPA 402-R-92-014 Radon Measurement in Schools, July 1993
- 4. Exercising due diligence to ensure that all laboratory firm employees (a) have adequate training and knowledge of analytical procedures used to determine radon concentrations, and (b) are listed with DEP as employees of a certified radon laboratory firm.
- 5. Exercising due diligence to ensure that all radon laboratory analysis is performed in accordance with quality assurance procedures set forth in the application and in § 240.606.
- 6. Exercising due diligence to ensure that DEP is provided written evidence of successful participation in DEP-approved radon measurement proficiency program for each radon measurement utilized. (§ 240.307)
- 7. Approving all data obtained from radon laboratory analysis of the measurement devices specified in the application.
- 8. Exercising due diligence to ensure a radon-related service or product is not advertised with false or misleading statements regarding the services or products offered, health effects, or property value. (§ 240.301)
- 9. Ensure participation in a continuing education program consisting of at least 16 hours of DEP-approved courses or seminars on radon or radon related topics each two-year certification cycle. (§ 240.306)
- 10. Ensure that DEP will be notified within 10 business days if a condition of the firm's certification or a condition of my certification changes. (§ 240.123(b))

### 2.4.3 ACKNOWLEDGEMENT FORM FOR CERTIFIED INDIVIDUAL IN RESPONSIBLE CHARGE OF RADON LABORATORY ACTIVITIES (continued)

Individual's Name	Date	

Firm's Name (if certified)

- 11. Ensure that DEP will be notified within 5 business days if the firm loses its certified individual. (§ 240.122(b)(1))
- 12. Ensure that laboratory records are maintained for a minimum of 5 years:
  - Documentation of each radon test result, containing the items outlined in § 240.303(1)(i).
  - All quality assurance requirements and corrective actions shall be documented, and the records retained (including calibration records, QC measurements, QC charts, and QA reports). (§ 240.602(b))
- 13. Ensure that all radon laboratory activities are reported to DEP within 45 days after the analysis date or if no reportable laboratory activities are performed within a 45-day period that this is reported to DEP. (§ 240.303(1)) This includes that all reportable laboratory activities performed by any of that firm's employees are submitted under the certified individual's testing certification number.
- 14. Ensure that the radon test results are reported in writing to the client and the owner or occupant within 10 business days of the analysis date in accordance with the provisions of § 240.303(3).
- 15. Ensure that each DEP-listed firm laboratory employee receives the required initial training and continuing education and that documentation of both the initial and continuing education are maintained for a minimum of 5 years. (§ 240.122(6) and (7))

Violation of my responsibilities as certified individual could result in the suspension of my certification or my decertification, as well as civil and criminal penalties.

Name of Firm (if certified)

Print name of Certified Individual

Signature of Certified Individual

2900-FM-BRP0010g Rev. 10/2022 Continuous Radon Monitor (CRM) Form



### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

## 2.4.4 Continuous Radon Monitor (CRM) Form

## Each testing or laboratory individual applicant applying to read/analyze CRMs or anyone adding/removing primary CRMs must:

- For applications, complete this document, attaching additional sheet(s) if necessary, and
- Submit a copy of the current calibration certificate for each monitor.
- For renewal applications, submit copies of the previous two years of calibrations for each monitor listed during the previous two-year certification cycle, including any monitors removed during that cycle.
- If requesting to add or remove a monitor, email this form to <u>RA-EPRadon@pa.gov</u>. If adding a monitor, include
  a current calibration certificate for each monitor being added.

			lete applicab	e box for each CRM
CRM Manufacturer/Model	CRM Device Serial #	Date to be Added* (mm / dd / yy)	Date to be Removed* (mm / dd / yy)	For Certification Applications: Check Continue to List
		/ /		
		1 1		
		/ /	1 1	
		/ /	1 1	
		1 1	1 1	
		/ /	1 1	
		/ /	1 1	
		/ /	1 1	
		/ /	1 1	

\*DEP will not back-date the approval of the removal and/or addition of any device prior to the date that DEP receives all the requirements from the certified individual to add and/or remove that device. However, DEP, when specifically written on this form, will date the removal and/or addition of a device for any future date up to 14 days after the receipt of all requirements to add/remove that device.

You may start testing with a specific serial-numbered device as of the date specified in DEP's written approval. You will be held responsible for all QA for specific serial-numbered devices you are requesting be removed from your certification until the date specified in DEP's written confirmation of the removal of that device.

Print name of DEP-Certified Individual

DEP Certification Number (If Currently or Previously Certified)

Signature of DEP-Certified Individual

2900-FM-BRP0010g Rev. 10/2022 Electret Reader Form Pennsylvania Department of Environmental PROTECTION

### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

## 2.4.5 Electret Reader Form

## Each testing or laboratory individual applying to read/analyze electrets or anyone adding/removing electret readers must:

- For applications, complete this document, attaching additional sheet(s) if necessary, and
- Submit a copy of the current calibration certificate and certified readings of reference electrets for each reader.
- For renewal applications, submit copies of the previous two years of calibrations and certified readings of reference electrets for each reader listed during the previous two-year certification cycle, including any readers removed during that cycle.
- If requesting to add or remove a reader, email this form to <u>RA-EPRadon@pa.gov</u>. If adding a reader, include a current calibration certificate and certified readings of reference electrets for each reader being added.

		Comp	lete applicable	e box for each Reader
Reader Manufacturer/Model	Reader Serial #	Date to be Added* (mm / dd / yy)	Date to be Removed* (mm / dd / yy)	For Certification Applications: Check Continue to List
			/ /	
			/ /	
		1 1	/ /	
		1 1	/ /	
			/ /	
			/ /	
			/ /	
			/ /	
			/ /	

\*DEP will not back-date the approval of the removal and/or addition of any device prior to the date that DEP receives all the requirements from the certified individual to add and/or remove that device. However, DEP, when specifically written on this form, will date the removal and/or addition of a device for any future date up to 14 days after the receipt of all requirements to add/remove that device.

You may start analyzing with an electret reader as of the date specified in DEP's written approval. You will be held responsible for all QA for each reader you are requesting be removed from your certification until the date specified in DEP's written confirmation of the removal of that device.

Print name of DEP-Certified Individual

DEP Certification Number (If Currently or Previously Certified)



### 2.4.6 QA FORM FOR CONTINUOUS RADON MONITOR PRIMARY TESTING AND/OR LABORATORY (PAGE 1 OF 3)

Ind	livid	ual'	s Name Date
Te	stin	g Fii	m's Name (if certified)
1.	do	cum	e certified testing or laboratory individual will ensure that each of the following is performed and ented for each specific serial-numbered CRM that I am DEP-listed to test and/or analyze with in /Ivania.
	cur wh	rent enev	<b>Itions –</b> Each continuous radon monitor must be calibrated in a DEP-approved calibration facility (DEP by approves NRPP/NRSB listed chambers) within one year from the date of the previous calibration and ver any alterations or repairs are made to the monitor. Current calibration must be verified prior to each ng performed. No testing will be performed with a CRM that is not currently calibrated.
	sci cle	ntilla an, a	<b>round measurements –</b> Shall be performed and documented after every 1,000 hours of operation of tion cell-type continuous radon monitors. The background shall be checked by purging the monitor with aged air or nitrogen in accordance with the manufacturer's instructions. In addition, the background shall itored in accordance with the manufacturer's instruction.
			<b>source counting –</b> Required prior to each measurement and must be documented for any CRM with a source.
			mparison measurements – Shall be performed for each continuous radon monitor without check capability.
		•	Shall be made at least every 10 <sup>th</sup> measurement with another DEP-listed passive device that is analyzed by a DEP certified laboratory or another CRM with a hard copy printout. Original printouts and/or DEP-certified lab results must be kept for each intercomparison.
		•	The intercomparison measurements shall be distributed systematically throughout the entire population of test locations.
		•	Each intercomparison measurement shall be performed with devices side-by-side.
		•	A measurement of at least 48 hours duration shall be conducted.
	wit	h the	<b>e instrument checks</b> – Before and after each measurement, the CRM shall be checked in accordance e manufacturer's instructions. The correct input parameters and the unit's clock or timer shall be verified g properly set and the pump's flow rates shall be verified to be within the manufacturer's specifications.
2.			retain all radon-related QA records and radon test result documentation for a minimum of years.
3.	per wri Th	rforr itten en, a	rstand that once a monitor is DEP-listed I am required to perform all QA for that monitor even if I n no testing with that monitor. The only exception to this requirement is after I have received approval from DEP that removal of that specific serial-numbered monitor has been approved. and only then, am I no longer responsible for the QA requirements for that monitor and I am also ger allowed to perform testing with that monitor in Pennsylvania.

### 2.4.6 QA FORM FOR CONTINUOUS RADON MONITOR PRIMARY TESTING AND/OR LABORATORY (PAGE 2 OF 3)

Ind	lividual'	s Name Date
Fir	m's Nar	ne (if certified)
4.	the sa	bllow the procedures as described below to add or remove a specific serial-numbered CRM(s) of ame MANUFACTURER, or to add a new MANUFACTURER of CRM. Examples of different acturers of CRM include Sun Radon, Corentium Pro, RadonAway, etc.
	l will su	Ibmit the following <b>to remove</b> any CRM:
	•	A written request signed by the certified testing individual and sent by postal mail, fax, or by emailing a PDF of the signed scanned request to <u>RA-EPRadon@pa.gov</u> .
	•	Include the manufacturer's name, model, and serial number of each CRM to be removed.
	been re	written response from DEP is received, stating that the specific serial-numbered primary CRM(s) has emoved from my certification, I understand that I am no longer required to perform any QA for that specific numbered CRM(s) and that I may no longer perform any radon testing in Pennsylvania with that CRM(s).
		ubmit the following <b>to add</b> a specific serial-numbered CRM (NOTE: This criteria applies only if you are v certified to use that specific MANUFACTURER of CRM):
	•	A written request signed by the certified testing individual and sent by postal mail, fax, or by emailing a PDF of the signed scanned request to <u>RA-EPRadon@pa.gov</u> .
	•	Proof of current calibration for each serial-numbered CRM to be added.
	•	Include the manufacturer's name, model, and serial number of each CRM to be added.
	•	If adding the same MANUFACTURER of CRM, but a different MODEL, radon measurement proficiency is also required. (Sun Radon 1027, 1028, 1028XP, and 1030; RadStar RS300, RS Alpha 310, RS800; etc, are each examples of different models of primary CRMs.)
		nsure I have received written approval from DEP to add a specific serial-numbered primary CRM and will form any testing in Pennsylvania prior to the approval date specified by DEP in that written approval.
		ubmit the following <b>to add a new MANUFACTURER of CRM</b> (Examples of different manufacturers of nclude Sun Radon, Corentium Pro, RadonAway, etc.)
	•	A written request signed by the certified testing individual and sent by postal mail.
	•	Proof of current calibration for each serial-numbered CRM to be added.
	•	The manufacturer's name, model and serial number of each CRM to be added.
	•	Radon measurement proficiency is required for each new <b>MODEL</b> of CRM to be added. (Sun Radon 1027, 1028, 1028XP, and 1030; RadStar RS300, RS Alpha 310, RS800; etc, are each examples of different models of primary CRMs.)
	•	A \$150 primary testing device fee.
		e I have received written approval from DEP to add a specific manufacturer and model of CRM and will testing prior to the approval date specified by DEP in that written approval.

### 2.4.6 QA FORM FOR CONTINUOUS RADON MONITOR PRIMARY TESTING AND/OR LABORATORY (PAGE 3 OF 3)

Ind	lividual's Name Date
Fir	m's Name (if certified)
• • •	
5.	I will use the following DEP-approved calibration facility for all CRM calibrations (DEP currently approves NRPP/NRSB-listed chambers.)
	Printed Full Name of DEP-Approved Calibration Facility
6.	I am aware that I as the certified testing individual, I am required to comply with the responsibilities as outlined above and failure to comply with these responsibilities could result in the suspension of my certification or my decertification, as well as civil and criminal penalties.
	Printed Full Name of Testing/LAB Firm (if certified)
	Printed Full Name of Testing/LAB Individual
	č
	Signature of Testing/LAB Individual     Date



### 2.4.7 QA FORM FOR ELECTRET ION CHAMBER PRIMARY TESTING AND/OR LABORATORY (PAGE 1 OF 4)

Inc	lividual's Name Date
Fii	m's Name (if applicable)
1.	I, as the certified testing or laboratory individual, will ensure that all of the following QA requirements are performed and documented.
	<b>Calibrations:</b> Each DEP-approved electret reader shall be calibrated simultaneously with its corresponding reference electret's recertification. Each DEP-approved electret reader must have a current calibration. To have a current calibration, the electret reader shall be calibrated in a DEP-approved calibration facility within one year from the date of the previous calibration or whenever any alterations or repairs are made to the reader. All calibration documents must be retained for a period of five years. Calibration factors for the electret ion chamber system shall be obtained from the manufacturer and documented. No electret reader will be used to analyze any testing performed in Pennsylvania unless currently calibrated and I have written approval from DEP to perform analysis with that reader.
	<b>Known exposure measurements (spikes):</b> Spikes consist of electrets that have been exposed to known concentrations in a DEP-approved radon chamber. Spikes shall be conducted at a rate of 3 per 100 test devices deployed, with a minimum of 3 spikes per certification year when tests are performed in that year, (DEP defines the certification year as each 12-month period beginning with the certification date of the certified individual required to perform the spikes) and a maximum required of 6 spikes per month. These spiked electrets shall be labeled and analyzed in the same manner as all other tests. Spikes shall be monitored using a means control chart. The means control chart must be established as follows:
	<ul> <li>Using a Relative Percent Error (RPE) value of plus and minus 10%, which corresponds to the 1 sigma level.</li> </ul>
	• A warning level of the RPE of plus and minus 20%, which corresponds to the 2 sigma warning level.
	• Control limits of the RPE of plus and minus 30%, which corresponds to the 3 sigma control level.
	Each RPE value shall be plotted on the means control chart within one week of return of the electret from the chamber. If the RPE value is outside the plus and minus 3 sigma control level, all measurements shall cease until the problem is evaluated and corrected. All evaluations shall be documented.
	In addition to the control charts, all spikes shall be documented on a form which contains at a minimum the following:
	<ul> <li>Radon chamber used.</li> <li>Electret serial numbers.</li> <li>Reference value (RV) from radon chamber.</li> <li>Measured spike value(s).</li> <li>Individual RPE results.</li> <li>Beginning and end date of certification year.</li> <li>Exposure dates.</li> <li>All corrective actions performed, if applicable.</li> </ul>

# 2.4.7 QA FORM FOR ELECTRET ION CHAMBER PRIMARY TESTING AND/OR LABORATORY (PAGE 2 OF 4)

Individual's Name	Date
Firm's Name (if applicable)	
<b>Duplicate Measurements (duplicates):</b> Duplicates measurements are per by-side. Duplicates shall be made in at least 10 percent of the total numer month, or 50 each month, whichever is smaller. The duplicates shall be dist entire population of test locations. Duplicate devices shall be treated is identified as duplicates if sent to a DEP-certified laboratory. Duplicates shall	mber of test devices deployed each tributed systematically throughout the identically in every respect and not
The relative percent difference (RPD) shall be calculated for all duplicate re or equal to 2.0 pCi/L. Two control charts shall be constructed to monitor dup	
• One for duplicates where the average is greater than or equal to 4.0	pCi/L; and
• One for duplicates where the average is greater than or equal to 2.0	pCi/L and less than 4.0 pCi/L.
Each RPD value shall be plotted on the control chart within one week of per	forming the duplicate measurement.
The RPD value shall be tracked using control charts from "Protocols for Measurements in Homes," EPA 402-R-92-003, May 1993, Appendix B, Exhi	
For duplicates when the average is greater than or equal to 4.0 pCi/L, all of t	the following apply:
• The control level shall be set at an RPD of 14%.	
• The warning level shall be set at an RPD of 28%.	
• The control limit shall be set at an RPD of 36%.	
For duplicates when the average is greater than or equal to 2.0 pCi/L and le apply:	ess than 4.0 pCi/L, all of the following
• The control level shall be set at an RPD of 25%.	
• The warning level shall be set at an RPD of 50%.	
• The control limit shall be set at an RPD of 67%.	
If the plotted RPD result falls outside of the control limit, the measurement identified and corrected.	ents shall cease until the problem is
If the plotted RPD result falls outside of the warning level, "Protocols fo Measurements in Homes," EPA 402-R-92-003, May 1993, Appendix B, Ex the action to be taken.	
In addition to the control charts, all duplicates shall be documented on a for	m which contains all of the following:
<ul> <li>Device serial numbers.</li> <li>Exposure dates.</li> <li>Each duplicate measurement result.</li> <li>RPD results.</li> <li>All corrective actions performed, if applicable.</li> </ul>	

# 2.4.7 QA FORM FOR ELECTRET ION CHAMBER PRIMARY TESTING AND/OR LABORATORY (PAGE 3 OF 4)

Inc	lividual's Name Date
Fir	m's Name (if applicable)
ГП	
	<b>Voltmeter routine instrument checks</b> Proper operation of the surface voltmeter shall be monitored following the manufacturers procedures for zeroing the voltmeter and analyzing the reference electrets. These checks shall be conducted at least once a week while the voltmeter is in use and shall be documented. A voltage reading of a reference electret difference of more than two volts from the reference electret specified value shall be considered a wrong reading. The second reference electret in the set shall be read to determine whether the wrong reading is in the first reference electret or in the reader. Corrective action shall be taken in consultation with the manufacturer. When zeroing the reader, if the voltmeter displays more than plus or minus three volts, corrective action shall be taken in consultation with the manufacturer.
	All routine instrument checks shall be documented on a form which contains all of the following:
	<ul> <li>Reader serial number.</li> <li>Date of analysis.</li> <li>Zero value.</li> <li>Reference electret values.</li> <li>All corrective actions performed, if applicable.</li> </ul>
2.	I will retain all radon-related QA records and radon test result documentation for a minimum of five (5) years.
3.	I understand that once a device is DEP-listed I am required to perform all QA for that device even if I perform no analysis with that device. The only exception to this requirement is after I have received written approval from DEP that removal of that specific serial-numbered electret reader has been approved. Then, and only then, am I no longer responsible for the QA requirements for that device and I am also no longer allowed to perform radon analysis with that device in Pennsylvania.
4.	I will follow the procedures as described below to add or remove a specific serial-numbered electret reader.
	I will submit the following to remove a specific serial-numbered electret reader from my individual certification:
	<ul> <li>A written request signed by the certified testing individual and sent by postal mail, fax, or by emailing a PDF of the signed scanned request to <u>RA-EPRadon@pa.gov</u>.</li> <li>Include the manufacturer's name, model and serial number of each electret reader to be removed.</li> </ul>
	After a written response from DEP is received, stating that the specific serial-numbered reader has been removed from my certification as of the date specified by DEP, I understand that I am then no longer required to perform any QA for that specific serial-numbered reader and that I may also no longer perform radon analysis with that reader(s) of any electret testing performed in Pennsylvania.
	I will submit the following to add a specific serial-numbered electret reader to my individual certification:
	<ul> <li>A written request signed by the certified testing individual and sent by postal mail, fax, or by emailing a PDF of the signed scanned request to <u>RA-EPRadon@pa.gov</u>.</li> <li>Proof of current calibration for each serial-numbered electret reader and reference electrets to be added.</li> <li>The manufacturer's name, model and serial number of each electret reader to be added.</li> </ul>
	I will ensure I have received written approval from DEP to add a specific serial-numbered electret reader and will perform no analysis of testing performed in Pennsylvania with that reader prior to the approval date specified by DEP in that approval letter.

## 2.4.7 QA FORM FOR ELECTRET ION CHAMBER PRIMARY TESTING AND/OR LABORATORY (PAGE 4 OF 4)

Ind	ividual's Name	Date
Fir	m's Name (if applicable)	
5.		ibration chamber(s) for all electret reader reference electret ntly approves NRPP/NRSB-listed chambers for electret spikes eaders.
	Printed Full Name of DEP-approved Reader	Calibration Facility
	Printed Full Name of DEP-approved	Chamber For My Reference Electrets
6.	I am aware that I as the certified testing i	ed Chamber Performing My Spikes ndividual am required to comply with the responsibilities as these responsibilities could result in the suspension of my s civil and criminal penalties.
	Printed Full Name of Testing/LAB Firm (If Certified)	
	Printed Full Name of Testing/LAB Individual	
	Signature of Testing/LAB Individual	Date



### 2.5 MITIGATION WORKER HEALTH AND SAFETY PLAN

Name of Certified Mitigation Individual

Name of Certified Firm (if applicable)

This worker protection plan will be kept on file and available at all times. Although this plan contains specific safety recommendations, it cannot address all the safety concerns associated with mitigation installation. The user has responsibility to establish appropriate safety practices.

Radon exposure records of each mitigator during the course of employment will be maintained and retained for a period of 5 years. The Radon Exposure Tracking Record in Section 2.6 or equivalent shall be used.

Radon exposure at each work site will be recorded based on: (1) the highest pre-mitigation indoor radon or working level measurement available, and (2) the time exposed (without respirator protection) at that level. The 4 working level months (WLM) over a 12-month period exposure limit will not be exceeded. (An equilibrium ratio of 50 percent shall be used to convert radon exposure to WLM.)

All OSHA, state, and local standards or regulations relating to worker safety and occupational radon exposure will be followed.

All employees will be trained on the hazards of radon and the risks associated with radon exposure. Guidance will be given on maintaining exposure as low as reasonably achievable. This training will be documented for new employees.

Appropriate safety equipment such as hard hats, face shields, ear plugs, and protective gloves will be available on the job site during cutting, drilling, grinding, polishing, demolishing, or other hazardous activity associated with radon mitigation projects.

All electrical equipment used during radon mitigation projects will be properly grounded. Circuits used as a power source should be protected by Ground-Fault Circuit Interrupters (GFCI).

When work is required at elevations above the ground or floor, all ladders or scaffolding will be safely installed and operated.

Work areas will be ventilated to reduce worker exposure to radon decay products, dust, or other airborne pollutants. In work areas where premitigation levels have been greater than 0.33 WL (66 pCi/L), fan(s) should blow outside air into the basement. If a fan is not available or weather conditions do not permit use of a fan, then opening appropriate windows to provide cross-ventilation should be tried. Where ventilation is impractical or where ventilation cannot reduce decay product levels to less than 0.33 WL (66 pCi/L) (based on a short-term test), respiratory protection conforming with the requirements in the NIOSH Guide to Industrial Respiratory Protection will be provided at the job site.

Where combustible materials exist in the specific area of the building where radon mitigation work is to be conducted and temperatures are high enough to induce a flame, a fire extinguisher suitable for type A, B, and C fires will be available in the immediate work area.

## 2.5 MITIGATION WORKER HEALTH AND SAFETY PLAN (continued)

Name of Certified Mitigation Individual

### Name of Certified Firm (if applicable)

In any area where building materials containing friable asbestos have been identified, or it is suspected that friable asbestos may exist; radon mitigation work will not be conducted without approval of an inspector or mitigator certified under provisions of the Asbestos Hazards Emergency Response Act (AHERA) and the Pennsylvania Department of Labor and Industry Act 194.

When mitigation work requires the use of sealants, adhesives, paints, or other substances that may be a health hazard, the applicable Material Safety Data Sheets (MSDS) will be provided to employees and the required safety procedures explained.

All relevant portions of the worker protection plan will be reviewed with all new employees upon employment, and all employees upon firm certification renewal. Confirmation of employees' knowledge of relevant portions of the worker protection plan will be recorded below with the employees' signature and date.

Signature of Certified Mitigation Individual

Required health and safety training provided to mitigation firm employees (each DEP-listed mitigation firm employee must complete to document required training has occurred):

Name	Signature	Date
Name	Signature	Date



## 2.6 RADON EXPOSURE TRACKING RECORD

(This documentation is not required to be submitted but must be available for review as part of DEP's inspection program.)

Name				Month(s)								
Company Name	Company Name											
Employee ID Numb	per				Year							
Date	Job Site	Radon Level (pCi/L)		Working Level (WL)		Hours of Exposure		Working Level Month (WLM)	Cumulative Exposure <sup>(1)</sup> (WLM)	Method Used to Assess Exposure <sup>(2)</sup>		
			÷200=		Х		÷170=					
			÷200=		х		÷170=					
			÷200=		Х		÷170=					
			÷200=		Х		÷170=					
			÷200=		Х		÷170=					
			÷200=		Х		÷170=					
			÷200=		Х		÷170=					
			÷200=		Х		÷170=					
			÷200=		Х		÷170=					
			÷200=		х		÷170=					
WL = <u>pCi/L</u> (Assum 200	ing 50% ER)					ended health or On-Site M			working level mo	onths (4 WLM)		



## 2.7 RADON MITIGATION STANDARDS AGREEMENT

Name of Certified Mitigation Individual:

Name of Certified Mitigation Firm (if applicable):

DEP regulations require persons conducting radon mitigation to do so in accordance with the Radon Mitigation Standards, § 240.308 for detached and attached residential buildings three stories or less in height, and ANSI/AARST RMS-MF 2014 for multifamily buildings. A person conducting radon mitigation activities shall conduct the mitigation in accordance with DEP-approved mitigation standards and shall comply with applicable statutes, regulations, ordinances, and building codes.

By signing below, you hereby agree to perform all radon mitigation activities in Pennsylvania (which includes all mitigation activities performed by firm employees under your responsible charge, if applicable) in compliance with § 240.308 and ANSI/AARST RMS-MF 2014.

Signature of Certified Mitigation Individual



## 2.8 ELECTION OF POST-MITIGATION TESTING OPTIONS FORM

Certified Mitigation Individual's Name: \_\_\_\_\_

Certified Mitigation Firm's Name (if applicable):

DEP regulations require that for a person performing mitigation, each building shall be tested for radon levels after the mitigation is performed. The post-mitigation testing shall be conducted no sooner than 24 hours after the completion of the mitigation.

## Select the post-mitigation testing option(s) below that you will use to ensure the required post-mitigation testing is performed after every mitigation system installation you perform.

My post-mitigation testing will be performed by a Pennsylvania DEP-certified tester within 30 days of the system installation.

Tester's Name:

Tester's Pennsylvania DEP Certification Number:

- I am a Pennsylvania DEP-certified tester and I will perform all post-mitigation testing within 30 days of the system installation.
- I will provide the homeowner with a short-term post-mitigation testing device from a DEP-certified laboratory.

Lab's Pennsylvania DEP Certification Number:

This short-term test device will:

- be placed, retrieved, and sent to the laboratory by the homeowner,
- the results of the test will always be sent directly from the laboratory to the homeowner,

- AND -

• the laboratory will also send a copy of the results to the mitigator who installed the system for submittal to DEP for the required 45-day reporting.

If I do not receive the post-mitigation test result within 20 days I will at a minimum:

Send a reminder letter to the homeowner and retain a copy of the letter for 5 years.

Any changes to this form must be submitted in writing and approved by DEP.

Signature of	Mitigation	Individual



### 2.9 RADON TESTING EMPLOYEE APPLICATION

By signing this document, I am stating that I understand, as a DEP-Listed Radon Testing Firm Employee, that I may only perform radon testing under the supervision of the DEP-Certified Radon Testing Individual for the firm in which I am employed.

The DEP ID badge issued to me shall be presented to the client upon request.

Testing Employee's Name:	Firet					
Last:	First:			Middle:		
Home Address:						
City:	State:	Zip:		County:		
Home Phone:	Work Phone: Email:					
Name of DEP-Certified Testing Firm:						
That firm's DEP-Certified Testing Indivi	dual's Name:					
List all radon testing devices the above-named DEP-Certified Testing Individual is certified to use in Pennsylvania.						
1.) 2.) 3.)						

I understand that if any of the following conditions occur, I can no longer perform radon testing activities in Pennsylvania as a DEP-Listed Testing Firm Employee:

• The DEP-Certified Testing Individual in responsible charge of the testing firm (listed above) in which I am employed is no longer DEP-certified or is no longer employed by that firm and therefore is no longer in responsible charge of that firm's testing activities.

OR

• The DEP-Certified Radon Testing Firm (listed above) that employees me is no longer DEP-certified as a radon testing firm.

OR

 If the Firm's DEP-Certified Testing Individual (listed above) removes me as a DEP-Listed Testing Firm Employee.

It is my responsibility to notify DEP of any changes to the information in this document. All notifications of changes will be made in writing and bear my signature. Changes may be sent by postal mail, fax, or by email of a PDF of your signed document.

Signature of DEP-Listed Testing Firm Employee

Printed Name of DEP-Listed Testing Firm Employee

DEP-Assigned Employee Number (If Applicable)

Date

Only DEP-Certified Testing Individuals or DEP-Listed Testing Employees may perform radon testing activities in Pennsylvania.



### 2.10 RADON MITIGATION EMPLOYEE APPLICATION

By signing this document, I am stating that I understand, as a DEP-Listed Radon Mitigation Firm Employee, that I may only perform radon mitigation under the supervision of the DEP-Certified Radon Mitigation Individual for the firm in which I am employed.

The DEP ID badge issued to me shall be presented to the client upon request.

Mitigation Employee's Name:						
Last:	First:		Middle:			
Home Address:						
City:	State: Zip:		County:			
Home Phone:	Work Phone:		Email:			
Name of DEP-Certified Mitigation Firm:						
That firm's DEP-Certified Mitigation Individual's Name:						

I understand that if any of the following conditions occur, I can no longer perform radon mitigation activities in Pennsylvania as a DEP-Listed Mitigation Firm Employee:

- The DEP-Certified Mitigation Individual in responsible charge of the mitigation firm (listed above) that employs me, is no longer DEP-certified or is no longer employed by that firm and therefore, is no longer in responsible charge of that firm's mitigation activities.
- The DEP-Certified Radon Mitigation Firm (listed above) that employees me is no longer DEP-certified as a radon mitigation firm.

### OR

OR

• If the Firm's DEP-Certified Mitigation Individual (listed above) removes me as a DEP-Listed Mitigation Firm Employee.

It is my responsibility to notify DEP of any changes to the information in this document. All notifications of changes will be made in writing and bear my signature. Changes may be sent by postal mail, fax, or email of a PDF of your signed document.

Signature of DEP-Listed Mitigation Firm Employee

Date

Printed Name of DEP-Listed Mitigation Firm Employee

DEP-Assigned Employee Number (If Applicable)

Only DEP-Certified Radon Mitigation Individuals or DEP-Listed Radon Mitigation Firm Employees may perform radon mitigation activities in Pennsylvania



### 2.11 RADON LABORATORY EMPLOYEE APPLICATION

By signing this document, I am stating that I understand, as a DEP-Listed Laboratory Firm Employee that I may only perform radon laboratory analysis under the supervision of the DEP-Certified Radon Laboratory Individual for the firm in which I am employed.

Laboratory Employee's Name:								
Last:	First:	First:			Middle:			
Home Address:								
City:	State:	Zip:		Cour	nty:			
Home Phone:	Work Phone:		Email:					
Name of DEP-Certified Laboratory Firm:								
That firm's DEP-Certified Laboratory Ind	That firm's DEP-Certified Laboratory Individual's Name:							
List all radon testing devices the al Pennsylvania.	pove-named DEP-Certi	fied Laboratory	individu	ıal is	certified	to	analyze	e in
1.)	2.)		3.)					

I understand that if any of the following conditions occur, I can no longer perform radon laboratory activities in Pennsylvania as a DEP-Listed Firm Laboratory Employee:

• The DEP-Certified Laboratory Individual in responsible charge of the laboratory firm (listed above) in which I am employed is no longer DEP-certified or is no longer employed by that firm and therefore is no longer in responsible charge of that firm's laboratory activities.

### OR

• The DEP-Certified Radon Laboratory Firm (listed above) that employees me is no longer DEP-Certified as a radon laboratory firm.

### OR

• If the Firm's DEP-Certified Laboratory Individual (listed above) removes me as a DEP-Listed Laboratory Firm Employee.

It is my responsibility to notify DEP of any changes to the information in this document. All notifications of changes will be made in writing and bear my signature. Changes may be sent by postal mail, fax, or by email of a PDF of your signed document.

Signature of DEP-Listed Laboratory Firm Employee

Date

Printed Name of DEP-Listed Laboratory Firm Employee

DEP-Assigned Employee Number (If Applicable)

Only DEP-Certified Laboratory Individuals or DEP-Listed Laboratory Employees may perform radon laboratory activities in Pennsylvania.

2900-FM-BRP0010q Rev. 1/2020



### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

### 2.12 TESTING FIRM CERTIFICATION OWNERSHIP FORM

Please complete <u>only one</u> of the boxes below. Complete box (1) if the owner is an individual person <u>or</u> (2) if the owner is a business entity.

(1) Testing Firm Owner's Name (Complete only if the owner is an individual person):					
Last:	First:	Middle:			
-OR-					

(2)Testing Firm Owner Name (Complete only if the owner is a business entity):

Please complete <u>all</u> of the following:

Owner's Mailing Address: (address where DEP will send correspondence relating to this testing firm)				
City:		State:	Zip:	County:
Primary Phone: Secondary Phone:		Email:		
Name of DEP-Certified 1	Festing Firm:			
Name of DEP- Certified	Testing Individual:			
I hereby agree as the ow any of the following chang		n to be re	sponsible for	submitting signed notification to DEP when
individual within 5 ifirm name, any of the contact the owner of this NOTE: The certified Employees for this firm The certified testing in	5 business days), t information as submitted firm testing individual for this m and all their testing activ	above, o firm is /ities perf n who ma	r in responsibl ormed in Per	g DEP of the loss of that certified testing le charge of any DEP-Listed Testing Firm ansylvania. igned request to DEP to add or remove any
Printed Full Name of this Testing Firm Certification's Owner (If the owner is a business entity, the name of the individual with the authority to sign on behalf of this business entity)				
(If the owner is a busines	of This Testing Firm Cer s entity, the signature of th on behalf of this business of	ie individu		Date



### 2.13 MITIGATION FIRM CERTIFICATION OWNERSHIP FORM

Please complete <u>only one</u> of the boxes below. Complete box (1) if the owner is an individual person <u>or</u> box (2) if the owner is a business entity:

(1) Mitigation Firm Owner's Name (complete only if the owner is an individual person):			
Last:	First:	Middle:	
-OR-			

(2) Mitigation Firm Owner Name (complete only if the owner is a business entity):

Please complete **all** of the following:

Owner's Mailing Address: (address where DEP will send correspondence relating to this mitigation firm)				
City:		State:	Zip:	County:
Primary Phone:	Secondary Phone:	Email:		-
Name of DEP-Certified I	Vitigation Firm:			
Name of DEP-Certified I	Nitigation Individual:			
I hereby agree as the ow any of the following chang		on to be r	esponsible fo	or submitting signed notification to DEP when
<ul> <li>the certified mitigation individual for this firm, (including notifying DEP of the loss of that certified mitigation individual within 5 business days),</li> <li>firm name,</li> <li>any of the contact information as submitted above, or</li> <li>the owner of this firm</li> </ul> NOTE: The certified mitigation individual for this firm is in responsible charge of any DEP-Listed Mitigation Firm Employees for this firm and all their mitigation activities performed in Pennsylvania. The certified mitigation individual is the only person who may submit a signed request to DEP to add or remove any mitigation firm employees to this firm's certification.				
Printed Full Name of this Mitigation Firm Certification's Owner (If the owner is a business entity, the name of the individual with the authority to sign on behalf of this business entity)				
(If the owner is a busines	of This Mitigation Firm C s entity, the signature of th on behalf of this business of	e individu		Date



### 2.14 LABORATORY FIRM CERTIFICATION OWNERSHIP FORM

Please complete <u>only one</u> of the boxes below. Complete box (1) if the owner is an individual person <u>or</u> box (2) if the owner is a business entity:

(1) Laboratory Firm Owner's Name (complete only if the owner is an individual person):			
Last: First: Middle:			
-OR-			

(2) Laboratory Firm Owner Name (complete only if the owner is a business entity):

Please complete all of the following:

Owner's Mailing Address: (address where DEP will send correspondence relating to this laboratory firm)				
City:		State:	Zip:	County:
Primary Phone: Secondary Phone:		Email:		
Name of DEP-Certified I	_aboratory Firm:			
Name of DEP- Certified	Laboratory Individual:			
I hereby agree as the ow any of the following chang		n to be re	sponsible for	submitting signed notification to DEP when
<ul> <li>the certified laboratory individual for this firm, (including notifying DEP of the loss of that certified laboratory individual within 5 business days),</li> <li>firm name,</li> <li>any of the contact information as submitted above, or</li> <li>the owner of this firm</li> </ul>				
	aboratory individual for thi m and all their laboratory a			e charge of any DEP-Listed Laboratory Firm Pennsylvania.
The certified laboratory individual is the only person who may submit a signed request to DEP to add or remove any laboratory firm employees to this firm's certification.				
<b>Printed Full Name of this Laboratory Firm Certification's Owner</b> (If the owner is a business entity, the name of the individual with the authority to sign on behalf of this business entity)				
(If the owner is a busines	of This Laboratory Firm s entity, the signature of th on behalf of this business	ne individu		Date

2900-FM-BRP0010t Rev. 10/2022 Instructions



### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

### SECTION 3 REQUIRED REPORTING

### 3.1 45-Day Reporting to GreenPort

### 3.1.1 General Guidelines for Reporting

- All primary testers (i.e. tester who place/retrieve <u>and</u> read/analyze their own devices), laboratories and mitigators must report within 45-days via GreenPort (DEP's web-based interface). See Section 3.1.2 below. If no radon related services have been provided during a 45-day period, you are required to inform DEP via the web-based GreenPort interface.
- If you are DEP-certified for both testing and mitigation and you perform your own post-mitigation testing those post-mitigation tests must be reported via DEP's Greenport under your:
  - 1.) testing individual DEP-certification number as a test you performed in Pennsylvania, AND
  - 2.) mitigation individual DEP-certification number as the mitigation post-test.
- There are two methods for 45-day reporting
  - 1.) Uploading TXT (comma delimited) or CSV (comma separated values) files via GreenPort allows multiple reports to be uploaded. See Section 3.2.
  - 2.) Entering reports one at a time via GreenPort.
- GreenPort instructions for first time users. See Section 3.3.
- GreenPort instructions for return users. See Section 3.3.1.

### 3.1.2 Determining Timeliness of Required Reporting to DEP

A \$150 fee will be assessed if there is a lapse in required reporting greater than 90 calendar days from:

- The latest device analysis date received for testing/laboratory reporting.
- The latest **mitigation completion date** received for the date of the mitigation system initial fan activation OR date of any repair(s)/alteration(s) to an existing mitigation system you completed.
- The last date a report of "no radon activities performed" was submitted.

### NOT the date the testing/laboratory and/or mitigation reports were submitted to DEP

It is the certified individual's responsibility to report radon-related activities, or no reportable radon-related activities, at least every 45 days via the main menu on DEP's GreenPort interface.

If there is no reporting for greater that 90 calendar days, a letter will be sent assessing a \$150 fee. If both the \$150 fee <u>and</u> updated reporting are not received within the required 30 calendar day period of the date on the 90-day late reporting fee letter, DEP may suspend the applicable radon certification until both items are received.

### 3.1.3 What Certification Number to Use When Submitting 45-Day Reporting

- Always submit your reporting under your DEP **INDIVIDUAL** Certification Number. (If there is a certified firm, submit ALL of that firm's reporting under that firm's certified **INDIVIDUAL's** certification number.)
- Never submit any reporting under a DEP FIRM Certification Number.

### 3.1.4 Useful Terms

File: A collection of reports uploaded in electronic form via GreenPort.

**Report:** Complete documentation of a job. Includes all information about the building, mitigation system, and all test results.

Record: One row in the file. Contains specific information on one test result or mitigation system completion.

### 3.2 Formats for Uploading Files Via DEP GreenPort

DEP accepts electronic reporting of radon test results and mitigation reports in these two formats:

### 1. Text – Comma Delimited

Formatting uses commas (delimiters) to separate each field from the other fields. All fields in a comma delimited radon data submission are text fields and are enclosed by quotation marks, **except the test sample result field**, which is a number field and is not enclosed by quotation marks. The file should be saved with a .txt extension.

There are 19 fields in a complete comma delimited radon data submission for radon testing and 17 fields for radon mitigation. These fields are described on the next two pages. All fields must be present, even if data is not contained in the field. A complete radon data submission using all 19 fields for radon testing would look like this:

"1234", "Joe Smith", "123 Main St.", "Apt. 3", "Harrisburg", "PA", "17123", " ", "22", "501", "801", "07122008", "07152008", "604", 3.5, "701", "N", " ", "07182008"

### 2. CSV – Comma Separated Values

Another option is to format a Microsoft Excel spreadsheet using the required fields and field parameters. The Microsoft Excel spreadsheet should be saved with a .csv extension.

There are 19 fields in a comma delimited data submission for radon testing and 17 fields for radon mitigation. All fields must be present, even if data is not contained in the field.

The fields for submitting testing and mitigation reporting are described on the following two pages.

### DATA FIELDS FOR TEST AND MITIGATION REPORTING VIA TXT (COMMA DELIMITED) OR CSV FILE

You may report multiple radon testing activities by uploading a file that contains your radon testing results or your radon mitigation systems installed. The file must match the format listed below. The upload process is a multi-step process in which the file data is automatically validated. If invalid data is found, you will be presented with an error report that you can save or print. A file that contains invalid data will not be accepted by the system. Once a file successfully passes the validation process, you will be given a final view of the file and will be asked to confirm that you want to submit the data to DEP.

### Example of a Radon Test Report

<u>Fields</u>	Example of Data	Description of Data
1.) DEP CERT #	1234	The four-digit DEP Cert.
		All firms should report under their certified individual's #
2.) Occupant's Name	Mary Smith	The name of the individual for whom the test was conducted
		Maximum 60 characters
		Not Mandatory to fill w/ information but the field must exist.
3.) Location Address	120 S. Main Street	The street address where the test was conducted
		Maximum 45 characters
4.) Additional Address Information	Apt. # 3	Additional address identifiers
		Maximum 45 characters
	Ditte hanne	Not Mandatory to fill w/ information but the field must exist.
5.) Location City	Pittsburgh	The city where the test was conducted Maximum 30 characters
6.) Location State	PA	Will always be "PA" (Only report tests performed in PA)
7.) Location Zip Code	17871	The five-digit Zip Code
8.) Location Zip Code Extension	5432	The four-digit Zip Code extension
o.) Location Zip Code Extension	5452	(e.g. the four numbers that follow after the main Zip Code)
		Not Mandatory to fill w/ information but the field must exist.
9.) Location County	03	The two-digit PA county code for the location tested
		See Section 3.4
10.) House Type Code	550	The three-digit code for house/building type
, .		See Section 3.4
11.) Test Location Code	808	The three-digit code identifying the location in the building where the
		test was performed
1		See Section 3.4
12.) Test Begin Date	07082009 OR	The date the test began
	07/08/2009	Format must be: MMDDYYYY or MM/DD/YYYY
13.) Test End Date	07102009 OR 07/10/2009	The date the test ended. Format must be: MMDDYYYY or MM/DD/YYYY
		1
14.) Test Measurement Method Code	601	The three-digit code for the test measurement method See Section 3.4
15.) Test Results	0.5	Test result
15.) Test Results	0.5	The test result taken to 1 decimal place, e.g. 11.3
		The lowest value that can be entered is 0.5
16.) Test Results Unit of Measure	701	The three-digit code for the measurement units
Code	-	(Value will always be "701")
17.) Active Mitigation System	Y	Use "Y" "N" "U" to indicate if active radon mitigation system operating
		during test. Y-Yes, N-No, U-Unknown
18.) Serial Number of CRM or	96CRM4134	Serial Number of CRM or electret reader used
electret reader ONLY		
19.) Analysis Date	07082009 OR	Date the device was read or analyzed
	07/08/2009	Format must be: MMDDYYYY or MM/DD/YYYY

\*Please note: Fields 2, 4, and 8 must exist in your report even if you don't have any information to fill in these fields. The **field** is mandatory while the **information** is not.

\*DO NOT USE HEADERS to label your fields. The Fields and Description is just to help organize your fields.

\*Do not include any EXTRANEOUS INFORMATION in your reporting (e.g. your name, firm's name, addresses, phone numbers etc.).

Regardless of the format you choose for radon mitigation reporting, each reported address must contain one row of these 17 fields for the Pre-test and one row for the Post-test. Fields 1-13 must be identical for all Pre & Post Test results reported at the same address.

Fields	Example of PRE –TEST	f one record POST-TEST	Description of Data
1.) DEP CERT #	1234	1234	The four-digit DEP Cert. # All firms should report under their certified individual's #
2.) Occupant's Name	Joe Smith	Joe Smith	The name of the individual for whom the test was conducted Maximum 60 characters Not Mandatory to fill w/ information but the field must exist.
3.) Location Address	1 Elm St	1 Elm St	The street address where the test was conducted Maximum 45 characters
4.) Additional Address Information	Apt. # 3	Apt # 3	Additional address identifiers Maximum 45 characters Not Mandatory to fill w/ information but the field must exist.
5.) Location City	Pittsburgh	Pittsburgh	The city where the test was conducted Maximum 30 characters
6.) Location State	PA	PA	Will always be "PA" (Only report systems installed in PA)
7.) Location Zip Code	17871	17871	The five-digit Zip Code
8.) Location Zip Code Extension	5432	5432	The four-digit Zip Code extension (e.g. the four numbers that follow after the main Zip Code) Not Mandatory to fill w/ information but the field must exist.
9.) Location County	03	03	The two-digit PA county code for the location tested See Section 3.4
10.) House Type Code	550	550	The three-digit code for house/building type See Section 3.4
11.) Remediation System Code	900	900	The three-digit code identifying the type of Mitigation System Installed See Section 3.4
12.) System Cost	1100.99	1100.99	This is a numeric field; only numbers may be entered NO dollar signs (i.e. \$) NO commas (i.e.,) NO words to describe the amount (i.e. dollars and/or cents)
13.) Completion Date	07032009 OR 7/3/2009	07032009 OR 7/3/2009	The date the mitigation fan was activated. Format must be: MMDDYYYY or MM/DD/YYYY
14.) Indicate Radon Test Type	PRE	POST	Indicate if this is a PRE-test or POST-test.
15.) Results	8.5	1.5	If there are several test results, enter this data in a new 17 field row The test result taken to 1 decimal place, e.g. 11.3 The lowest value that can be entered is 0.5
16.) Results Unit of Measure Code	701	701	The three-digit code for the measurement units (Value will always be "701")
17.) Building Location	801	801	The three-digit code identifying the location in the building where the test was performed. See Section 3.4

### **Example of One Mitigation Report**

\*Please note: Fields 2, 4 and 8 must exist in your report even if you don't have any information to fill in these fields. The **field** is mandatory while the **information** is not.

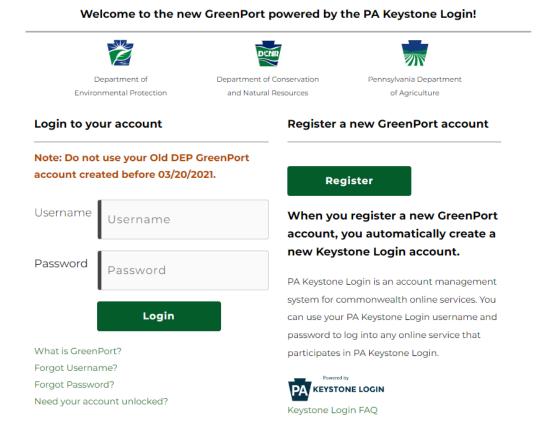
\* DO NOT USE HEADERS to label your fields. The Fields & Description is just to help organize your fields.

\* Do not include any EXTRANEOUS INFORMATION in your reporting (e.g. your name, firm's name, addresses, phone numbers etc.)

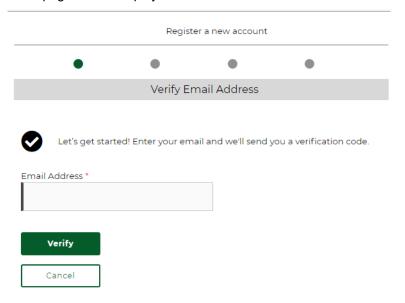
### 3.3 GreenPort Instructions for FIRST Time Users

Follow the steps below to create a Keystone login to access your DEP Greenport account.

- 1. Go to https://www.depgreenport.state.pa.us
- 2. GreenPort login screen will be displayed.



- 3. Click "Register."
- 4. "Register a New Account" page will be displayed.



5. Enter your email in the "Email Address" field and click "Verify."

	Regi	ster a new account			
٠	•	•	•		
	Verify Email Address				
Let's get starte	d! Enter your ei	mail and we'll send	you a verification code.		
test.greenport3@gr	mail.com				
Verify					
Cancel					

6. Informational pop up will be displayed as below.

	Register a new account
•	We sent you a new verification code. Please check your email. Verification code is valid for 10 mins only.
P Send Code	Close Window
Enter Code *	
Validate Code	

8. Email is verified.

7. Enter the verification code from the email and click "Validate Code."

	DEP Green	Port - Email V	erification/		
•	noreply@pa.gov to me マ Email Verification C	Code is P2S-OQC			
	Reply	Forward			
		Register a	new account		
	•	•	•	٠	
		Enter Verific	ation Code		
$\searrow$	Please check yo Send Code Again	ur email and Enter	verification co	de.	
Enter C P2S-	Code * OQC				
Val	<b>lidate Code</b> Cancel				
		Register	a new account		
	•	•	•	•	
		Enter Verific	ation Code		
Verification Code has been accepted					
Please check your email and Enter verification code. Send Code Again					
Enter	r Code *				
P2	s-oqc				
V	/alidate Code				

2900-FM-BRP0010t Rev. 10/2022 Instructions

9. User profile screen is displayed.

Register a new account		
• •	• •	
Us	ser Profile	
Enter account information be	low.	
First name *	Middle name	
Last name *	Date Of Birth *	
	mm/dd/yyyy	
Phone *	Phone Extn	
(###) ###-####		
Address Information		
Country		
United States 🔶		
Address *		
Enter Address Manually		
Next		

10. Enter account information and click "Next."

Registe	r a new account
• •	• •
User	Profile
Enter account information below	<i>I.</i>
First name *	
FIRSTNAME	Middle name
Last name *	Date Of Birth *
LASTNAME	01/01/2001
Phone *	Phone Extn
(123) 456-7890	
Address Information	
Country	
United States 🔶	
Address Line 1*	
400 Market St	
Address Line 2	
City*	State *
Harrisburg	Pennsylvania 🔶
Zip Code *	Zip Extn
17101	
Back to Address Lookup	
Next	

11. "Security Information" screen is displayed. Choose a username and password, following password requirements listed on the screen.

Register a new account		
• •	• •	
Secur	ity Information	
Enter account information b	elow	
Jsername *		
	The password must pass these rules:	
	<ul> <li>Must be between 12 to 128 characters in length</li> </ul>	
he username should be between 6 and 20 characters and should no ontains any spaces but hyphen(-) special character allowed.	Do not include any of your username, your first name, or your last name	
Password *		
	The password must pass 3 out of 4 of these rules:	
	<ul> <li>One uppercase letter.</li> </ul>	
/erify Password *	One lowercase letter.	
	One numeric number.	
	□ One non-character (such as !,#,%,^, etc).	
Enable 2 factor	Password Strength: Invalid	

12. Select a security question on each dropdown, answer the chosen question and click "Submit "

Select your Multi-Factor Questions below.	
Security Question 1 * Select a security question	,
Security Answer 1*	
Security Question 2*	
Select a security question	
Security Answer 2 *	
Security Question 3 *	
Select a security question	
Security Answer 3 *	

13. Confirmation text is displayed as below.

Register a new account
Successful Registration!
You have successfully registered your new account and must log-in.
You will now be taken to the Log-in Page.
Click the link below if you are not automatically redirected.
Back to Log-in

14. Go back to the Login page and enter newly registered Keystone Login account's username and password and click "Login." On the GreenPort Dashboard, under "My Applications," select the tab for DEP. Under reporting, enroll in the "Radon Reporting" application.

GreenPort	Dashboard		
Welcome,	!		٢
My Application	s		
🝘 DEP	DCNR		
DEP   Depa	rtment of Envi	ronmental Pr	otection
Permitting	9		▲
No application	found.		
Reporting			•
🖹 Rad	on Report - Rado	on Reporting	

15. Click on "Radon Report" to be directed to the screen below.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

Radon Reporting Trading Partner Agreement

Identification
Your name and password are identifying you. If you are using another person's name and password, you are submitting false information. If someone else has access to your name and password, notify us immediately.
Security Procedure
When you send us information, we will display it as it will appear in the Department of Environmental Protection's official record. If you have corrections to make to the displayed information, resubmit the information or click on the "Cancel" button. Do not click the "Submit" button if the information is incorrect. If the information is correct, click the "Submit" button to make it part of DEP's official record.
False Reporting
You are submitting official information. Any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. § 4904 (unsworn falsification to authorities). If you discover that the information you submitted is incorrect, notify us immediately.
Electronic Signature
When you click a button labeled "I Agree" or "Submit," it has the same legal effect as a written signature under the Electronic Transactions Act, 73 P.S. § 2260.101 et seq.
Confidential Information
You must identify any confidential information. Any information that is not identified as confidential will be treated as public information. The Department will notify you if it does not agree that the identified information is confidential.
Paper Submission
If you do not agree to the terms of this Agreement, click the "I Don't Agree" button. You can download the current paper form from our website: www.dep.state.pa.us.
Agreement
By clicking the "I Agree" button, you agree to be bound by the terms of this Trading Partner Agreement, which shall be governed by the laws of Pennsylvania and enforced in Pennsylvania courts.
I Agree I Don't Agree

16. After reading the Radon Reporting Trading Partner Agreement, click "I Agree." You will be directed to the screen below. Please verify that your portal information below is correct. The email address displayed on this page is where all automatically generated emails regarding reporting submitted via DEP's GreenPort will be sent. This includes emails confirming submittal of reporting and corrections to submitted reporting. If there is any information that needs to be corrected, click on <u>DEP GreenPort</u> BEFORE PROCEEDING. Changes in contact information must also be submitted in writing to DEP's Radon Certification Section. Please call (717) 783-3594 for guidance. Click "Submit."

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

# Radon Reporting Verify Portal Information

Please verify that your information is correct. It will be inserted as the official record of the Report Preparer. If there is any information that needs to be corrected, please revise it at the <u>DEP GreenPort</u> before proceeding.

MY PORTAL INFORMATION		
Name:		
Address:	400 Market St Harrisburg, PA 17101	
Phone:		
Email:		
	Submit	

17. This page allows you to enter you DEP Certification number and PIN. You should have received a PIN in the mail from DEP. The DEP Certification # below must always be the certified INDIVIDUAL'S number (Never enter firm certification numbers). \*For lost PIN numbers please call DEP's Radon Certification Section at (717) 783-3594. Click "Enter."

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# Radon Reporting **PIN Entry**

PIN Entry	
DEP Individual Certification #:	
PIN:	
Enter	Portal Info

Logout of the Application

18. The Radon Main Menu page is where all reports for radon testing and mitigation are entered.

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#### **Radon Reporting Radon Main Menu**

\*It is required that laboratories, mitigators, and primary testers report to DEP every 45 days even if no radon activities have been performed.

#### Testing and Laboratory Analysis Reporting

Enter a New Testing Report

#### Upload a TXT or CSV File of Testing Reports

#### Mitigation Reporting

- Enter a New Mitigation Report Upload a TXT or CSV File of Mitigation Reports

#### No Radon Activities Performed

Reporting - No Testing Activities Reporting - No Mitigation Installed

#### Radon In Water Reporting

Enter a New Water Test Report

#### Other Options

- Change PIN
- Switch to Another Certified Individual Logout of the Application



Last Testing Reported Date :04/14/2022 Last Mitigation Reported Date :04/14/2022

Your next Test Report is due by 05/29/2022 Your next Mitigation Report is due by 05/29/2022 19. Once a report is entered and "Submit" is clicked, you will be directed to the following screen. You have the option of returning to the Main Menu where you can check your next due date for 45-day reporting in the bottom right-hand corner of the screen.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

# Radon Reporting Radon Reporting - Thank You!

#### <u>Thank You</u>

Your report has been submitted to DEP. You should receive a confirmation email from DEP.

In order to reduce the number of confirmation emails that you receive, a single email will be sent at the end of each day that lists all of the Radon Testing reports that you submitted during that day. Routine system maintenance may occasionally delay this email by a day. In this case, the email may include reports submitted on consecutive days. If you do not receive a confirmation email that includes this report, please notify DEP's Help Desk.

#### <u>Main Menu</u>

# 3.3.1 GreenPort Instructions for RETURN Users

- 1. Go to https://www.depgreenport.state.pa.us
- 2. Enter Keystone login's username and password and click to login.
- 3. On the GreenPort Dashboard, under "My Applications", select the tab for DEP.
- 4. Follow the directions above, beginning with number 15.

# 3.4 Codes for Testing and Mitigation

REME	EDIATION SYSTEM CODES		PENN	SYLVAN		OUNTY CODES	
900	Sub-slab Ventilation - Generic	Cou	nty	Code		County Coc	
901	Sub-slab Pit Cut-Out	Adar				ackawanna	35
902	Slab-on-Grade Depressurization	Alleo	Allegheny		L	ancaster	36
903	Depressurize Captive Membrane		strong	03	L	awrence	37
904	Passive Depressurization	Beav	/er	04		ebanon	38
905	Parimeter Floor Ventilation	Bedf	ord	05	L	ehigh	39
906	Outside Parimeter Ventilation	Berk	S	06	L	uzerne	40
907	Wall Depressure Trough Suction	Blair		07	L	ycoming	41
908	Wall Depressure Point Suction	Brad	ford	08	Ν	McKean	42
909	Sub-slab Combo	Buck	S	09		Mercer	43
910	Air Exchange	Butle		10		<b>/</b> lifflin	44
919	Air Exchange Combo	Cam		11		Nonroe	45
920	Pressurization	Cam	eron	12		Nontgomery	46
929	Pressurize Combo	Carb	on	13		Nontour	47
930	Forced Ventilation	Cent		14		Northampton	48
931	Passive Ventilation	Ches		15		Northumberland	49
932	Pressure Neutralization	Clari		16		Perry	50
939	Ventilation Combo	Clea		17		Philadelphia	51
940	Sealing	Clint		18		Pike	52
941	Isolation	Colu		19		Potter	53
942	Barrier Membrane Floor Replace	Craw		20		Schuylkill	54
949	Sealing Combo		nberland 21			Snyder	55
961	New Construction – Passive Sys.	Daup		22		Somerset	56
962	New Construction – Active Sys.		ware 23			Sullivan	57
963	Activate a Passive System	Elk	24			Susquehanna	58
964	Modify an Existing System	Erie		25		Гіода	59
		Faye		26		Jnion	60
	ATION SYSTEM CODES	Fore		27		/enango	61
Y	Active System Operating During Test	Fran		28		Varren	62
N	No Active System Operating	Fulto		29		Vashington	63
U	Unknown if There is an Active Mitigation System	Gree		30		Vayne	64
	Operating (labs only)		ingdon	31		Vestmoreland	65
		India		32		Wyoming	66
		Jeffe		33	1	/ork	67
		Junia	ala	34			
	TESTING METHOD CODES	но	USE TYPE CC	DES	BU	ILDING LOCATION (	ODES
601	Continuous Radon Monitor – TEST	501	2-Story		801	801 Basement	
615	Continuous Radon Monitor – LAB		3-Story			Slab on Grade	
617	Electret – Short Term – TEST		Ranch			First Floor Above Ba	sement
618	Electret – Long Term – TEST		Split Level			Second Floor	
619	Electret – Short Term - LAB		Bi-Level			Third Floor	
620	Electret – Long Term – LAB		Trailer			Above Third Floor	
613	Alpha Track – LAB		Apartment			First Floor Above Crawl Space	
612	Charcoal Canister – LAB		Townhouse/Co	ndo		Unknown (labs only)	
616	Liquid Scintillation – LAB		Cape Cod				
606	Continuous Working Level – TEST		Contemporary				
	~	511					
			Commercial Bl	dg.	CO	CODE DESCRIPTION - UNIT	
			School	*		Picocuries/liter	
			Public Bldg.				
		550		only)			
				,			
	<u></u>		1				

# 3.5 Reporting Results to the Client

The following must be included on any radon result given to the public.

- Name/address/telephone number of the tester.
- Name/DEP certification number of the laboratory (if other than the tester).
- Name/address of the test location, including, when applicable, the apartment, suite, or building number.
- Name/DEP certification number of each person placing/retrieving each testing device.
- Type, manufacturer, and model number of the test device used.
- Serial number of the test device used.
- Start/stop date and time of the test.
- DEP's "Notice to Clients" statement as indicated in § 240.302.
- Radon level in pCi/L and rounded to one decimal place.
- The average of co-located test device results, if applicable, as well as individual results.
- A statement describing any observed tampering, interference, or deviations from required test conditions.
- Health risk information as stated in § 240.310(b)(1)(xix).
- The location within the building of each measurement device (e.g. basement, 1<sup>st</sup> floor, slab on grade, etc.).
- Calibration expiration dates if using a continuous radon monitor or electret reader.
- If using a continuous radon monitor, a copy of the device printout.
- A statement whether a mitigation system was observed during testing, including whether the mitigation system was
  operating.
- A description of unusually severe storms or periods of high winds during the test period.
- Notification of an invalid radon test with an explanation and without a test result given, if applicable.
- A description of the condition (open, closed, or not applicable) of permanent vents that allow outdoor air into the building, such as crawl space vents or combustion air supply to combustive appliances.

#### For a template of a result report form which contains all the requirements stated above please see Section 3.5.1, Example of Radon Test Result Reporting Form to Clients, on the next page.

#### 3.5.1 Example of Radon Test Result Reporting Form to Clients

Test Company Street Address City, State, Zip Code Telephone Number Test Location Street Address City, State, Zip Code

Customer Name <street, city, state, zip code> (if different from test location as written above)

Detector placed by <Tester's name and DEP certification number> Detector retrieved by <Tester's name and DEP certification number> Comments <Include any observed tampering or deviation from required test conditions, yes or no> <Mitigation system observed/not observed; system operating/not operating> <Permanent vents open, closed, not applicable> <Severe storms or periods of high winds>

The following measurements were made with: <detector type, manufacturer, and model number> Analysis of these measurements was performed by: <name of laboratory and laboratory's DEP certification number> (This is required only for devices that you do not read/analyze.)

Continuous Radon Monitor or Electret Reader Serial Number:

Continuous Radon Monitor or Electret Reader Calibration Expiration Date:

Detector ID#	Level Tested	Start Date	Start Time	Stop Date	Stop Time	Radon level pCi/L	+/- pCi/L
5475 5085 Basement /	basement basement	02/21/2009 02/21/2009 5.4pCi/L	0940 0940	02/23/2009 02/23/2009	1030 1030	5.6 5.2	0.3 0.3

## **Radon Health Risk Information**

Radon is the second leading cause of lung cancer, after smoking. The U.S. Environmental Protection Agency (EPA) and the Surgeon General strongly recommend taking further action when the home's radon test results are 4.0 pCi/L or greater. The national average indoor radon level is about 1.3 pCi/L. The higher the home's radon level the greater the health risk to you and your family. Reducing your radon levels can be done easily, effectively and fairly inexpensively. Even homes with very high radon levels can be reduced below 4.0 pCi/L. For further information about reducing elevated radon levels please refer to the "Pennsylvania's Consumer's Guide to Radon Reduction."

## NOTICE

THE RADON CERTIFICATION ACT REQUIRES THAT ANYONE WHO PERFORMS RADON TESTING, MITIGATION, OR LABORATORY ANALYSIS ACTIVITIES MUST BE CERTIFIED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION. ANY PERSON PROVIDING THESE RADON SERVICES SHALL PRESENT TO THE CLIENT A CURRENT DEP-ISSUED PHOTO IDENTIFICATION CARD UPON REQUEST. IF YOU HAVE QUESTIONS, YOU MAY CONTACT DEP AT THE BUREAU OF RADIATION PROTECTION, DEPARTMENT OF ENVIRONMENTAL PROTECTION, P.O. BOX 8469, HARRISBURG, PA., 17105-8469, (717) 783-3594.

#### NOTE: If measurement was made using a continuous radon monitor, a copy of the device printout is attached.



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

# **SECTION 4**

## **DEP-APPROVED EXAM/COURSE INFORMATION**

#### 4.1 DEP-Approved Exam Providers

- National Radon Proficiency Program (NRPP)
  - NRPP exam(s) are administered by Examity and may be registered by visiting NRPP's website at <a href="https://nrpp.info/nrpp-exams/">https://nrpp.info/nrpp-exams/</a>.
- National Radon Safety Board (NRSB)
  - NRSB exams include a virtual live proctor and may be registered by visiting NRSB's website at <a href="http://nrsb.org/exams/digital-exam-information/">http://nrsb.org/exams/digital-exam-information/</a>.

#### 4.1.1 For Individual Radon Testing Certification the following exams are acceptable:

- NRPP Radon Measurement Professional Examination
- NRSB Radon Measurement Specialist Exam (RMS)

#### 4.1.2 For Individual Radon Mitigation Certification the following exams are acceptable:

- NRPP Radon Mitigation Specialist Examination
- NRSB Radon Mitigation Specialist Exam (RRS)

#### 4.2 DEP-Approved Course Information

DEP currently only accepts courses approved by NRSB or NRPP. For a complete list of their approved courses, please visit their websites at:

 NRPP Courses:
 https://nrpp.info/education-training/initial-training-courses/

 NRSB Courses:
 https://www.nrsb.org/courses/

#### 4.2.1 Initial testing/laboratory course requirement

All applicants for Pennsylvania radon testing and/or laboratory analysis individual certification must provide proof of having completed an **initial** measurement course approved by NRPP or NRSB.

#### 4.2.2 Initial mitigation course requirement

All applicants for Pennsylvania radon mitigation individual certification must provide proof of having completed an initial mitigation course approved by NRPP or NRSB.

#### 4.2.3 Initial training requirement for firm employees

The firm's certified individual shall ensure that each firm employee receives initial training. Documented initial training may be given by the firm's certified individual or through a DEP-approved training program. Requirements for initial training can be found in § 240.102(b)(6) for testing firm employees, § 240.112(b)(6) for mitigation firm employees, and § 240.122(b)(6) for laboratory employees.

#### 4.2.4 Continuing education course requirement

All renewal applicants for Pennsylvania radon testing, mitigation, and/or laboratory analysis individual certification must provide proof of having completed one of the following within the previous two-year individual certification cycle.

#### 4.2.4.1 For testing/laboratory individual renewals

Passing any DEP-approved radon exam (See Sections 4.1.1 and 4.1.2 above.)

-OR-

Having completed 16 hours of continuing education courses approved by NRPP or NRSB.

#### 4.2.4.2 For mitigation individual renewals

Passing any DEP-approved radon exam (See Sections 4.1.1, and 4.1.2 above.)

-OR-

Having completed 16 hours of continuing education courses approved by NRPP or NRSB.

#### 4.2.4.3 For firm employee renewals

The firm's certified individual shall ensure that each firm employee receives continuing education within the previous two-year firm certification cycle. Documented continuing education may be given by the firm's certified individual or through a DEP-approved training program. Requirements for continuing education can be found in § 240.102(b)(7) for testing firm employees, § 240.112(b)(7) for mitigation firm employees, and § 240.122(b)(7) for laboratory employees.

#### 4.2.4.4 DEP-Approved Continuing Education Course Information

DEP currently only accepts continuing education courses approved by NRSB or NRPP. For a complete list of their approved courses, please visit their websites at:

 NRSB Courses:
 https://www.nrsb.org/courses/continuing-education-courses/

 NRPP Courses:
 https://nrpp.info/education-training/category-1-courses/

#### 4.2.5 <u>Continuing Education Credit Criteria for Certified Individuals</u>

- Formal classroom, webinars, and home study radon courses.
   DEP-approved, one (1) hour for each hour of course work.
- Radon-related symposium/conference attendance.

One (1) hour for every two (2) hours attended.

- Technical papers written and presented formally, or as a poster session, at a conference. Four (4) hours per paper. Credit given for the first presentation only.
- Radon article published in a technical publication.
   Eight (8) credits per article.
- Public outreach radon presentations.
- One (1) hour per documented presentation.
- Instruction

Two (2) hours of credit granted for each hour of instruction per radon training course. No additional credit awarded for teaching the same course.

- Attendance at local/regional meetings of professional/trade associations if radon-related. One (1) credit hour per meeting with a maximum of four (4) hours per two-year period.
- Degree programs and formal post-secondary course work in science, engineering, or related field. Determined by DEP on a case-by-case basis.



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

#### SECTION 5 QUALITY ASSURANCE PROGRAM FOR RADON TESTING/LABORATORY ANALYSIS

Please contact the Radon Certification Section for a copy of a DEP-approved quality assurance plan template. Templates are available for testing certification only.

## 5.1 BASIS AND PHILOSOPHY

A QUALITY ASSURANCE PLAN (QAP) is a written document, which presents, in specific terms, the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities that are designed to ensure the validity and reproducibility of measurements.

A QAP must identify and be specific for each measurement method used. It provides details, practices, and procedures unique to the devices used to provide consumers with radon measurement results.

#### PRIMARY TESTING FIRMS OR INDIVIDUALS

If you analyze radon measurement detectors, read electret ion chambers, or read continuous radon monitors, you are a PRIMARY testing firm or individual. You must address ALL QA elements.

#### SECONDARY TESTING FIRMS OR INDIVIDUALS

If you utilize another company or individual (laboratory) to analyze or read your radon detectors, you are a SECONDARY firm or individual and need only address the indicated QA elements (\*).

#### LABORATORY FIRMS OR INDIVIDUALS

If another firm or individual utilizes you to analyze their radon measurement passive detectors, electric ion chambers, continuous radon monitors, or if you analyze your own activated charcoal, liquid scintillation, or alpha track detectors you must address all QA elements.

#### 5.2 QA PLAN ELEMENT FORMAT

- 1.0 \* Signature page.
- 2.0 \* Table of contents, with revision numbers and dates.
- 3.0 \* Organization and responsibilities.
- 4.0 \* Sampling procedures.
- 5.0 \* Detector custody.
- 6.0 Calibration procedures and frequency.
- 7.0 Analytical procedures.
- 8.0 \* Data calculation, validation, and reporting.
- 9.0 \* Internal quality control checks.
- 10.0 \* Procedures used to assess data precision, relative bias, and lower limit of detection (LLD).
- 11.0 \* Quality assurance audits.
- 12.0 \* Corrective action.
- 13.0 \* Quality assurance reports to management.

#### 5.3 SIGNATURE PAGE

Submit a title page which must include the signatures of the QA officer, certified individual and owner/president.

# QUALITY ASSURANCE PLAN FOR NAME OF FIRM OR CERTIFIED INDIVIDUAL"

# "DATE"

# "DATE OF LATEST REVISION"

(signature of certified individual)	date
(signature of QA officer)	date
(signature of president/owner)	date

## 5.4 TABLE OF CONTENTS

SUBMIT a table of contents which must include section numbers for each of the elements of the QAP, and the most current date that each element was revised (as shown below).

SUBMIT all revisions to DEP prior to implementation.

# TABLE OF CONTENTS

Signature page (See Section 5.3)	Revision Date
Table of contents	Revision Date
Organization and responsibilities (See Section 5.5)	Revision Date
Sampling procedures (See Section 5.6)	Revision Date
Detector custody for field operations (See Section 5.7)	Revision Date
Calibration procedures and frequency (See Section 5.8)	Revision Date
Analytical procedures (See Section 5.9)	Revision Date
Data calculation, validation, and reporting (See Section 5.10)	Revision Date
Internal QC checks (See Section 5.11)	Revision Date
Procedures used to assess precision, relative bias, and lower limit of detection (LLD) (See Section 5.12)	Revision Date
QA audits (See Section 5.13)	Revision Date
Corrective action (See Section 5.14)	Revision Date
QA reports to management (See Section 5.15)	Revision Date

#### 5.5 ORGANIZATION AND RESPONSIBILITY

The direct and ultimate responsibility for assuring data quality rests with the laboratory or primary testing firm/individual. These people have the primary responsibility for developing QA policies and standard operating procedures, and delegating QA authority and responsibility.

(Firm only) An applicant for firm certification must "employ at least one individual who is certified to test/analyze and who is in responsible charge of the firm's radon testing/laboratory activities." The certified individual must manage, supervise, or direct the firm's testing/laboratory activities.

SUBMIT a figure or chart showing the organization and lines of authority. The names of all key individuals who are responsible for analyses, data assessment, and project management should be included.

INDICATE if the applicant is an individual, partnership, limited-partnership, corporation, or other entity.

SUBMIT the name and address of parent corporation, or subsidiaries, if any.

SUBMIT the names of all non-certified firm employees who will perform radon testing services and specify duties of those employees. These employees are under the responsible charge of the certified individual. They may not begin any testing activities without prior written approval from DEP.

#### 5.6 SAMPLING PROCEDURES

Precise sampling procedures that reflect Title 25 of the Pennsylvania Code Chapter 240.310, Testing Protocols. For testing multifamily buildings, follow ANSI/AARST MAMF-2017, "Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings," or its equivalent as determined by DEP. "Radon Measurement in Schools," Revised Edition July 1993 (EPA 402-R-92-014), or its equivalent as determined by DEP, must be followed for all testing performed in schools.

The description should be simple enough that a nontechnical person unfamiliar with the method would understand the description of the method used.

SUBMIT an explanation, in detail, for the following:

- a. Testing method theory of operation (how does the detector work?)
- b. Measurement conditions:
  - 1. Short/long-term test.
  - 2. Placement restrictions.
  - 3. Measurement constraints such as temperature, humidity, air flow, wind, barometric pressure, etc.
  - 4. Closed-house conditions.
  - 5. Any other comments, as appropriate.
- c. Testing requirements for real estate transactions.
  - 1. Short/long-term tests.
  - 2. Placement restrictions.
  - 3. Measurement constraints such as temperature, humidity, air flow, wind, barometric pressure, etc.
  - 4. Closed-house conditions.
  - 5. Methods of test noninterference you utilize (example: agreement forms, posted signs, documentation, tape, seals, interference-resistant testing devices).
  - 6. Any other comments, as appropriate.
- d. Procedures for retrieving the detector.
  - 1. (Secondaries only) explain how the detector will get from the test location to the laboratory.

#### 5.7 DETECTOR CUSTODY

This section describes the chain-of-custody procedures, forms, documentation, and the responsibilities of each person who is needed to ensure both the technical validity and the legal defensibility of data obtained from all measurements.

Each device must carry a unique identification/serial number.

Your detector custody and tracking forms should include:

- a. Detector acquisition information.
- b. Documentation of all readings, analyses, and other operations performed on the detector.
- c. A unique identification/serial number for each device.
- d. Name and certification number of testing individual placing the detector.
- e. Building address of test, and owner or occupant name.
- f. Reason for test (general or real estate transaction), and any special agreements (closed-house conditions, nontamper, etc.)
- g. Location of the test in the building.
- h. Name and certification number of testing individual retrieving the detector.
- i. Measurement results.
- j. Device disposition (storage, disposition, or shipment to a laboratory).
- k. Any remarks, regarding the test, testing conditions, etc. which you may have regarding the defensibility and validity of the test.

SUBMIT example(s) of detector tracking forms for documenting the transfer of detectors between the laboratory and service organization, or public, for each testing method you provide.

#### 5.8 CALIBRATION PROCEDURES (Primaries and Laboratories only)

This section of the QAP describes the specific calibration procedures and frequency of calibration for each analytical system, instrument, device, and any components (scalers, flowmeters, etc.) used to obtain measurement results. A summary table can be used, whenever possible, to present the information.

The term calibration is used to describe the process to determine a conversion factor relating device or system response (in counts, voltage loss, or track density per time) to radon or decay product concentration (in pCi/L or WL). Calibration is different from routine measurements made to assess relative bias or check the calibration factor of the system: these are called spiked or known exposure measurements.

Calibration measurements are measurements made in a known radon environment, such as a calibration chamber. Detectors requiring analysis, such as charcoal canisters, alpha track detectors, and electret ion chambers are exposed in a calibration chamber and then analyzed. Instruments providing immediate results, such as continuous working level and radon monitors, should be operated in a chamber to establish individual instrument calibration factors.

Participation in the DEP-approved radon measurement proficiency (RMP) program will not satisfy the need for annual calibration, as this program is a performance test, not a calibration procedure.

Providers of measurements with active devices are required to recalibrate their instruments at least one year from the date of the previous calibration.

It is recommended that each active detector shall have its identification code and its latest calibration date written on the outside of the detector.

Determine where and by whom your calibration will be performed.

- a. The development of your calibration plan with an official from the calibration facility is recommended.
- b. Any facility you choose should provide copies of their most recent intercomparison with a federal facility for your records. These intercomparisons should be conducted at least once every six months, and preferably more frequently.

Prepare a calibration plan, specifying:

- a. The number/types/serial or ID numbers of the equipment to be calibrated.
- b. The radon concentrations or range of radon concentrations, and the number of devices to be exposed at each concentration.
- c. Durations of exposure.
- d. Other factors that affect results, including equilibrium ratios, temperature, humidity, and storage conditions or durations.
- e. Specific protocols for handling/opening/operating the devices, including unopened blanks.
- f. Document the calibration, including the conditions, concentrations, unusual occurrences, and results.
- g. Incorporate the results of the calibration into the measurement operation: i.e., change calibration factors.

Calibration procedures are not required to be submitted. They must be available for review as part of DEP's inspection program.

SUBMIT the name(s) and address of calibration facilities you utilize.

#### 5.9 ANALYTICAL PROCEDURES (Primaries and Laboratories only)

This section of the QAP should describe the procedures by which the detectors will be analyzed.

Primary testers may develop their own standard operating procedures (SOP'S) or use manufacturer developed SOP's.

Secondary testers should have a copy of their laboratory's analytical procedures.

Standard operating procedures (SOP's) for each measurement method analysis system shall include:

- a. List of all equipment used for radon detector analysis. Only DEP-approved testing methods and equipment may be used.
- b. Specific operating procedure for each analysis system.
- c. Margin of error within each measurement method you analyze.

Analytical SOPs do not need to be submitted as part of this application. They must be available for review by DEP as part of DEP's inspection program.

SUBMIT a list of all equipment used for radon detector analysis. Only DEP-approved testing methods and equipment may be used.

MAINTAIN a list of any standards/sources used, the isotope and activity, their preparation, and proof of license, if applicable. If you have any questions about the requirement for source licensing, contact Radiation Control - Licensing Section (717) 787-3720.

## 5.10 DATA CALCULATION, VALIDATION, AND REPORTING

This section includes a description of the methods by which the readings produced by the instrument or detector are recorded, transformed to radon concentrations, and reported to the client and DEP.

Data calculation (primaries and laboratories only)

- a. SUBMIT a summary of your data calculation procedures.
- b. SUBMIT all equations and calculation methods needed to derive a final test result and explain as needed.
- c. If you use computer software, SUBMIT the name and a brief description of the software. You should have the software manual for the software you use.

#### Data validation

- a. SUBMIT an explanation of how data will be checked for errors.
- b. SUBMIT an explanation of how anomalous data (extremely high or low results, results beyond prescribed limits, etc.) will be treated. For example: redo calculations, recount, check equipment, check input data, etc.
- c. SUBMIT an explanation of how often and by whom checks will be performed.

#### Data reporting

- a. (PRIMARIES only) SUBMIT reports to DEP per 25 Pa. Code 240.303. Remember to submit all final reports in the format designated by DEP within the required 45-day time period. (See Section 3.)
- b. SUBMIT an explanation of how results of radon testing will be retained by the certified individual for five (5) years, at a minimum.
- c. SUBMIT a copy of the form you use to report results to clients (an example form is found in Section 3.5.1). Results to clients should be delivered within five business days after the results are obtained.

## 5.11 INTERNAL QUALITY CONTROL CHECKS

This section describes your quality control checks. These QC checks must reflect the standards in Title 25 of the Pennsylvania Code § 240.604, QA requirements for testing using primary devices; § 240.605, QA requirements using secondary devices; or § 240.606, QA requirements for laboratories.

Routine instrument performance checks, and preventative maintenance.

- a. SUBMIT an explanation of your routine instrument performance checks procedures. It should include use of internal standards (check cells, blank canisters, etc.) and other routine instrument performance checks (example: checking the battery, pump flow rates, and filters, etc.) their frequency, and treatment of results (from control charts).
- b. SUBMIT corrective actions taken if results fall outside predetermined limits.
- c. Documentation of the routine performance checks is not required to be submitted but must be available for review as part of DEP's inspection program. SUBMIT a statement addressing this availability.

Use of known exposure measurements (spiked samples) to assess relative bias.

- a. SUBMIT the frequency requirements for the testing devices you use: refer to the specific testing method in Title 25 of the Pennsylvania Code § 240.604, QA requirements for testing using primary devices; § 240.605, QA requirements using secondary devices; or § 240.606, QA requirements for laboratories.
- b. Passive detectors are exposed in a DEP-approved radon chamber.
- c. SUBMIT the name and address of the radon chamber you use for spikes.
- d. Active detectors are required to be calibrated at least once every 12 months.
- e. Spiked sample results should be recorded on a control chart to determine any consistent bias in the test results and the need to make corrections. SUBMIT an explanation of where you record spiked sample results.

Duplicate measurements should be placed and analyzed so that measurement precision of each measurement method/device can be evaluated and tracked.

- a. SUBMIT the frequency requirements for the testing devices you use: refer to the specific testing method in Title 25 of the Pennsylvania Code § 240.604, QA requirements for testing using primary devices; or § 240.605, QA requirements using secondary devices.
- b. SUBMIT an explanation of where you record duplicate sample results. Duplicate sample results should be recorded on a control chart to determine precision with the test results and the means to investigate and correct unacceptable precision.
- c. (SECONDARIES) Submit an explanation of how you communicate duplicate tests with the laboratory who analyzes your devices.

#### 2900-FM-BRP0010v Rev. 1/2020

#### Blanks

- a. Passive detectors
  - 1. SUBMIT the frequency requirements for the testing devices you utilize: refer to Title 25 of the Pennsylvania Code § 240.605, QA requirements for testing using secondary devices.
  - 2. SUBMIT the frequency requirements for the testing devices you analyze: refer to Title 25 of the Pennsylvania Code § 240.606, QA requirements for laboratories.
- b. Active detectors (if applicable)
  - 1. Perform sufficient instrument background measurements to establish a reliable instrument background and to act as a check on instrument operation. SUBMIT an explanation of how you perform and document these measurements, if applicable.

#### Recordkeeping

**Records should be maintained for a minimum of five (5) years.** Items to be included in a separate QA logbook or computerized logbook for each active instrument or passive method:

- a. Equipment calibration records
- b. Laboratory background measurements
- c. Background measurements
- d. Results of all QC measurements
- e. Routine instrument performance checks

The logbook is not required to be submitted but must be available for review as part of DEP's inspection program. SUBMIT a statement addressing the availability.

# 5.12 PROCEDURES USED TO ASSESS PRECISION, RELATIVE BIAS, AND LOWER LIMIT OF DETECTION (LLD)

Quantitative quality assurance objectives for precision and bias for any parameter being measured (for example: flow rates, weight gains, etc.) or any measured value used to calculate radon concentration should be presented in this section.

*NOTE*: PRECISION is defined as the measure of a variability of a process used to make repeated measurements under carefully controlled (identical) conditions. Duplicate measurements provide a check on precision.

BIAS is defined as the degree of agreement of a measurement with an accepted reference or true value. Measurement of spiked samples provide a check on bias. Bias may be expressed in terms of percent difference.

SUBMIT a description of the processes (including equations, calculations, statistical tests, control charts, etc.) by which:

- a. Duplicate measurement results will be analyzed to estimate precision.
- b. Known exposure (spiked) measurement results will be used to assess system bias.
- c. Field blanks will be used to assess the background level and lower limit of detection.

## 5.13 QUALITY ASSURANCE AUDITS

This section of the QAP should describe the plans for internal audits, including who will conduct them, when they will be conducted, and the focus of the audits. The QA officer should conduct an audit after any change in method or procedure, and at least once every six months. Additional audits should be conducted periodically during the operations to check on the accuracy of the reported results.

- a. All testers/labs should maintain auditable records appropriate for their activities for a minimum of five (5) years.
- b. All QA audits should be documented in a written report that specifies the nature and findings of the audit.
- c. Testers may or may not be notified of inspections by DEP in advance. All logbooks and QA records should be on-hand on company premises.

#### 2900-FM-BRP0010v Rev. 1/2020

Focus of QA audits

- a. Recordkeeping.
- b. QC measurements.
- c. Standard operating procedures.
- d. Training and on-going training of staff, including the certified individual.

SUBMIT a copy of the procedures you use for conducting internal audits. Submission of a QA audit report is not required.

#### 5.14 CORRECTIVE ACTION

There may be different types of corrective action that will be required as a result of QC measurement results. This section of the QAP should describe the corrective action to be taken based on the results of the items listed below.

SUBMIT a brief explanation of your corrective action procedures on the following results, actions, and situations.

- a. The control charts. Specify corrective measures to be taken to ensure data acceptability.
- b. (Secondaries only) If the precision estimated by the user is not within the precision expected of the measurement method, the problem should be reported to the analysis laboratory and the cause investigated and corrected.
- c. The corrective action taken to correct problems found during internal audits and DEP inspections.
- d. The corrective action to be taken when there are deviations from the proper procedure (e.g. detectors not returned within 10 days of exposure, weight gains, house conditions, improperly returned devices, device tampering, etc.).

#### 5.15 QUALITY ASSURANCE REPORTS TO MANAGEMENT

The purpose of this section is to: identify the individuals responsible for reporting; describe the form and content of the written reports; and plan the presentation of QA/QC data so that management can monitor data quality effectively.

This section should describe:

- a. Individuals preparing and receiving reports.
- b. The frequency of written report submission.
- c. Changes in the QAP.
- d. Summary of QA/QC problems, recommended solutions, and results of corrective actions.
- e. Results of QA audits and DEP inspections and recommendations.
- f. Measurement data quality assessment in terms of precision, relative bias, field blanks, and lower limit of detection.
- g. Limitations on use of the measurement data.
- h. Intercomparisons records.
- i. Calibrations.
- j. DEP-approved RMP Program status.

SUBMIT a copy of your procedures for QA reports to management.

A QA report is not required to be submitted but must be available for review as part of DEP's inspection program. SUBMIT a statement addressing this availability.

#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

#### **SECTION 6**

## **RADON MITIGATION ACTIVE SYSTEM FEE FORM**

As required by § 240.309, (1) a person who installs or is in responsible charge of employees who install an active radon mitigation system, or (2) a person who converts or is in responsible charge of employees who convert a passive radon mitigation system to an active radon mitigation system in Pennsylvania, shall submit to DEP the following:

• This completed form. (This form must be completed and submitted within 10 business days after the end of each quarter, even if no mitigation systems were installed or activated in that quarter.)

- AND -

• If applicable, an active radon mitigation system fee of \$50 per installed or activated system, by check or money order, payable to the "Commonwealth of Pennsylvania".

		DEP-Certified Mitigation Individual's Information
Last Name:		First Name:
DEP Certification	on Number:	Business Phone Number:
Business Maili	ng Address:	
		Installed or Activated Last Quarter x \$50 = \$ (Total Amount Due)
Check/Money (	Drder #	
Circle Calenda	r Quarter Subm	ission: Q1 Q2 Q3 Q4 Year:
Dates of Calen		
Q1 = Jan 1 - Ma		
Q2 = Apr 1 – Ju		Q4 = Oct 1 – Dec 31
	<u>IVIA</u>	this completed form with applicable check or money order to: Department of Environmental Protection (DEP)
		Bureau of Radiation Protection, Radon Division
		P.O. Box 8469
		Harrisburg, PA 17105-8469
WARNING: TH	IE STATEMEN	IS CONTAINED OR REFERENCED HEREIN ARE MADE SUBJECT TO THE
		ISOLIDATED STATUTES, SECTION 4904 (Relating to Penalties for Unsworn False
	overnmental Au	

The certified mitigation individual signing this form attests that the information is true and accurate to the best of their knowledge.

Printed Name:	Signature:
	Date:



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF RADIATION PROTECTION

# SECTION 7 PHOTOGRAPHY GUIDELINES

## PICTURE SETUP

- Head should be directly facing the camera.
- Photo should capture slightly above top of hair to middle of chest.
- Eyes should be open and looking at the camera.
- Eyeglasses should be worn if normally used by the subject.
- Glare on eyeglasses can usually be avoided with a slight upward or downward tilt of the head.
- Background should be plain white or off-white.
- Do not wear hat or headpiece unless worn daily for religious purposes. They should not obscure or cast shadows on the eyes or any other part of the face.

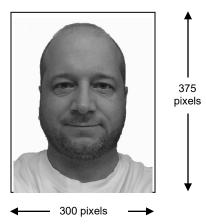
#### ELECTRONIC TRANSMITTAL

- DEP prefers photos be submitted by e-mail to <u>RA-EPRadon@pa.gov</u>. Be sure to give the name of the person in the photo and his or her DEP certification number (if known).
- Photo must be a JPG file, attached, not embedded, to your e-mail. Most e-mail programs have a file attachment icon that resembles a paper clip for attaching files.
- Photo dimensions must be a minimum of 300 pixels x 375 pixels.
- File attachment(s) must total less than 14 MB per e-mail message.
- Scanned photos must be cropped to the printed area and not crooked.

## PRINTED PHOTOS

• If you prefer sending a printed photo, passport photos are preferred. Other prints may be accepted but must be printed from a commercial photo printer. Prints made from desktop inkjet printers cannot be scanned and will not be accepted.

If you have any questions about your photo quality, please contact the radon division.



\*Please note all photos that are submitted to DEP need to be an updated photo taken within the last 3 months.

PA Department of Environmental Protection Bureau of Radiation Protection P.O. Box 8469 Harrisburg, PA 17105-8469