

BOWSER-MORNER, INC.
PROCEDURE FOR A NRSB PROFICIENCY TEST

The following procedure should be used by participants in a Proficiency Test to satisfy the requirements of the National Radon Safety Board's (NRSB's) Proficiency Program:

1. The participant should contact Bowser-Morner personnel to schedule a proficiency test, and get copies of the application forms, before sending any devices to Bowser-Morner. This will minimize the time that the participant is without a monitor or a set of passive devices. The participant should call Pam Kilburn, at (937)236-8805, Ext. 259, or Phil Jenkins at Ext. 248.
2. Bowser-Morner personnel will mail or FAX to the participant a work agreement which includes a description of the services to be performed, estimated dates of commencement and completion, the costs for the chamber exposure and shipping and handling, and the terms of the agreement.
3. The participant must send or deliver to Bowser-Morner (1) the monitor or passive devices to be exposed in the chamber, (2) a completed "Application for NRSB Proficiency Test," (3) a partially completed "Analysis Reporting Form," (4) the signed work agreement, (5) and a check in the amount specified on the work agreement or credit card information (MasterCard, VISA or American Express). Bowser-Morner's shipping address appears on the work agreement. If passive devices, such as charcoal canisters or E-Perms, are being exposed, the participant must send five devices. If a monitor is being exposed, the client must include a brief set of instructions for the operation of the monitor.
4. Bowser-Morner personnel will expose the monitor or devices in the radon calibration chamber and will ship the monitor or devices to the client with the start and stop dates and times of the exposure. (For alpha-track devices or long-term electret ion chamber devices, the start and stop dates and times may not be disclosed to the participant; instead the participant may be given an assumed exposure period, such as 100 days.)
5. The participant must report the measured radon concentration value(s) to Bowser-Morner in writing by mail or FAX within two weeks of the end of the chamber exposure. If passive devices were exposed, five measured values must be reported. If a monitor was exposed, only one measured value must be reported. For example, for a Honeywell or Sun Nuclear monitor do not report both the "overall average" and the "EPA average." Also, do not merely send a copy of the printout from the monitor.
6. Bowser-Morner will mail a report of the results of the proficiency test to the participant and will send the information to the NRSB. This is typically done within one week of receiving the measured value(s) from the participant. The test is passed if each of the reported values is within 25% of Bowser-Morner's chamber value.
7. If the test is failed, the participant may schedule one retest with Bowser-Morner at no charge except for the return shipment. The participant is encouraged to determine the cause of the failure of the test and to take corrective action, if necessary.

Instructions for Application for NRSB Proficiency Test

- Item 1. Circle the two-letter abbreviation for the type of device that is being submitted for a proficiency test. Circle only one abbreviation. A separate form must accompany each device type being submitted. If you circle "OT" then please attach another sheet explaining what type of device is being submitted. Enter the name of the manufacturer and model of the device being tested. Enter the time period in days for which this device was designed to be used in the field.
- Item 2. Enter your full name and NRSB Certification number, if you have a number.
- Item 3. Enter your company name.
- Item 4. Enter your mailing address. This is the address to which we will mail the report to you.
- Item 5. Enter your shipping address. This is the address to which we will ship your device(s) back to you.
- Item 6. Enter the telephone number that you prefer that we use if we need to speak to you. Enter your fax number and e-mail address if you have them.
- Item 7. Sign the form and date it. This is the date on which you are applying for the proficiency test. This signed and dated form, and the partially completed "Analysis Reporting Form," MUST be received at Bowser-Morner, Inc. before the proficiency test will be initiated.

Instructions for Analysis Reporting Form

1. When initially sending in the devices or monitor for a proficiency test, enter your company name, circle the device type (the same as on the Application for NRSB Proficiency Test), and enter your NRSB Certification number, if you have one. Do not enter any further information. Do not sign and date the form at this time. Send this form and the completed Application for NRSB Proficiency Test along with the devices, a signed work agreement, and a check or credit card information to:

Ms. Pam Kilburn
Bowser-Morner, Inc.
4514 Taylorsville Road
Dayton, Ohio 45424-2440
2. Bowser-Morner personnel will enter information in the boxed area of the form, as well as the date by which measurement results must be returned, during the proficiency test exposure.
3. After receiving the devices or monitor from Bowser-Morner, analyze the devices or download data from the monitor. Enter the serial number(s) of the devices or the monitor and the measurement result(s) in the spaces indicated at the bottom of the page. For a monitor report only one measurement result. For radon measuring devices, report results in the unit of pCi/L to one decimal place. For a continuous working level monitor, report the result in the unit of WL to three decimal places. Sign and date the form. Return the form by FAX (937-233-2024) or mail to Bowser-Morner by the date indicated in the shaded area near the bottom of the page.

Application for NRSB Proficiency Test

A completed application form must accompany each device type that is submitted for a proficiency test. Applications that are incomplete or contain illegible information will not be accepted. Please refer to instructions before completing this form.

Please Print or Type

1. Select the measurement device type (only one) for this application from the list below. Circle the abbreviation for that type.

AC AT LS ES EL CR CW GR GW OT

AC = Activated Charcoal adsorption

AT = Alpha-Track Detectors

LS = Charcoal Liquid Scintillation Chamber)

ES = EIC (Short-Term Electret Ion

EL = EIC (Long-Term Electret Ion Chamber)

CR = Continuous Radon Monitor

CW = Continuous Working Level Monitor

GR = Grab Sampling - Radon

GW = Grab Sampling - Working Level

OT = Other EPA-approved method

Manufacturer _____ Model _____

Enter sampling time for device(s) _____ days

2. Name: Title _____ First _____ MI _____ Last _____

NRSB Certification # (if known):

3. Company Name: _____

4. Mailing Address:

Street _____ P.O. Box/RFD _____

City _____ State _____ Zip _____

5. Shipping Address: (if same as mailing address then enter "SAME")

Street _____ Box/RFD _____

City _____ State _____ Zip _____

6. Telephone: (_____) - _____

Fax: (_____) - _____

E-mail: _____

7. Signature _____ Date _____

NRSB Proficiency Test

Analysis Reporting Form

Company Name: _____

Method (circle one): AC AT LS ES EL CR CW GR
GW OT

NRSB Certification # (if known): _____

Chamber Information

Air Velocity: _____ ± _____ ft/min Elevation at chamber facility = 820 feet

Particulate Conc.: _____ ± _____ CN/cc Background Radiation = 7 μ R/h

(CN = Condensation Nuclei, only used for Working Level measurements)

Exposure Data: Times are in 24-hr (military) units, Eastern Standard Time (EST)

Device Relative	Beginning of		End of		Temp.	Humidity
	Serial #	Chamber Exposure	Chamber Exposure	Temp.		
_____	Date ___/___/___	Time _____	Date ___/___/___	Time _____	_____°F	_____%
_____	Date ___/___/___	Time _____	Date ___/___/___	Time _____	_____°F	_____%
_____	Date ___/___/___	Time _____	Date ___/___/___	Time _____	_____°F	_____%
_____	Date ___/___/___	Time _____	Date ___/___/___	Time _____	_____°F	_____%
_____	Date ___/___/___	Time _____	Date ___/___/___	Time _____	_____°F	_____%

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Measurement Results

Device Serial #
received

Measurement (pCi/L or WL)

Date results must be
at Bowser-Morner, Inc.:

____/____/____

Signature _____

Date _____