

**COMPARISON OF EPA *CITIZENS GUIDE TO RADON AND EPA INDOOR ...MEASUREMENT DEVICE PROTOCOLS* WITH EPA *HOME BUYERS-SELLERS GUIDE AND EPA PROTOCOLS FOR ...MEASUREMENTS IN HOMES* (10/25/07)**

<b>GUIDANCE</b>	<b><i>CITIZENS GUIDE/DEVICE PROTOCOLS</i> (General Public)</b>	<b><i>BUYERS-SELLERS GUIDE/HOME PROTOCOLS</i> (Real Estate)</b>
<b>TEST LOCATION</b>	<p><u>Lowest lived-in level</u> such as                      ...regularly used room, eg.: living room, playroom den, bedroom...but not kitchen, laundry room, closet, or bathroom.</p> <p>Also where device will not be disturbed &amp; not near draft nor excessive heat or humidity.                      ≥ 20" above floor; ≥3' windows &amp; outdoor openings                      ≥ 12" exterior wall; ≥4" from other objects; and                      if suspended, from 6'-8' above the floor.</p>	<p><u>Lowest area suitable for occupancy</u> without renovation.                      ...subject to interpretation, determined how buyer will use home.</p> <p>Same.</p> <p>Same.</p> <p>Same.</p>
<b>PRETEST CONDITIONS</b>	<p>If 2 or 3 day test, closed building conditions 12 hours before test begins required.</p> <p>If 4 to 6 days, recommended prior to measurements</p>	<p>Same.</p> <p>Same.</p>
<b>INITIAL TEST</b>	<p>Short term (≤ 90 days; <u>should</u> be under closed building conditions)                      ...if 2 or 3 day test, <u>should</u> avoid testing during unusually severe storms or unusually high winds.                      ...if 2 or 3 day test, <u>must</u> establish closed house conditions 12+ hours before test begins                      ...if 4 to 6 day test, <u>should</u> establish closed house conditions 12+ hours before test begins</p>	<p><b><u>Three Testing Options:</u></b></p> <p><b>1. Sequential Testing:</b> 2 similar devices deployed in same location for same duration.                      ...first test results not reported until second test results and average of both reported.</p> <p><b>2. Simultaneous Testing:</b> 2 similar devices deployed 4" apart for same duration                      ...first, if both tests are either ≥ 4pCi/l or if both test results are &lt; 4 pCi/L, report the test results                      ...then calculate RPD                      ...if RPD &gt; 36%, investigate source of error                      ...if RPD &gt; 67%, investigate source of error.                      ...if one ≥ 4 pCi/l and one &lt;4pCi/l and the higher result is:                      ≤ 2X the lower result, report both results and their average                      &gt;2X the lower result, report both results, the average, <u>and recommend retesting.</u></p> <p><b>3. Single Test:</b> Requires continuous monitor that integrates and records data hourly.                      ...periodic results should be averaged and reported to the client.</p>
<b>FOLLOW UP TEST</b>	<p>...if initial test &lt;4pCi/L follow-up test is probably not needed except in future.                      ...if initial test ≥4 pCi/L, do follow-up test in same location as initial test follows.                      ...if initial test ≥8 pCi/L*, do short-term follow-up (under closed building conditions).                      ...if initial test &lt; 8 pCi/L*, do long-term follow-up.</p> <p>* = for exams before April 2009, use 10 pCi/L</p>	
<b>MITIGATION DECISION</b>	<p><b>Always</b> based upon 2 tests                      ...average of initial and follow-up short-term tests or                      ...the long term follow-up test.</p>	<p>Based upon average of 2 short-term tests <u>or</u> ..                      1 average produced by continuous monitor.</p>