

Bowser-Morner, Inc.
Radon Reference Laboratory

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Bowser-Morner, Inc.

BMI Radon Reference Lab

- In operation since April 1992.
- Designed and directed by Phil Jenkins, formerly associated with the radon reference lab at Mound.
- Independent testing laboratory; no competition with testing or mitigation companies or manufacturers.

BMI Radon Reference Lab

- Provide quality control exposures in chamber with controlled conditions for:
 - Calibration
 - Spiking
 - Blind Testing
 - Research and Development

BMI Radon Reference Lab

- Perhaps contrary to popular belief, there IS a place where testing and calibration of radon decay product (RDP) measuring devices can be done.
- We have been doing RDP exposures for calibration, spiking and R & D for about 15 years.
- We blind test biannually the dosimeters that Canadian uranium miners wear.

Who is Phil Jenkins?

- BS Chem E, MS & PhD Bionucleonics (Health Physics) from Purdue, CHP since 1980
- Radon experience in one form or another since 1975 with
 - Tennessee Valley Authority (3 years)
 - Mound (13 years)
 - Bowser-Morner (since June 1991)
- Radon chamber experience since 1980

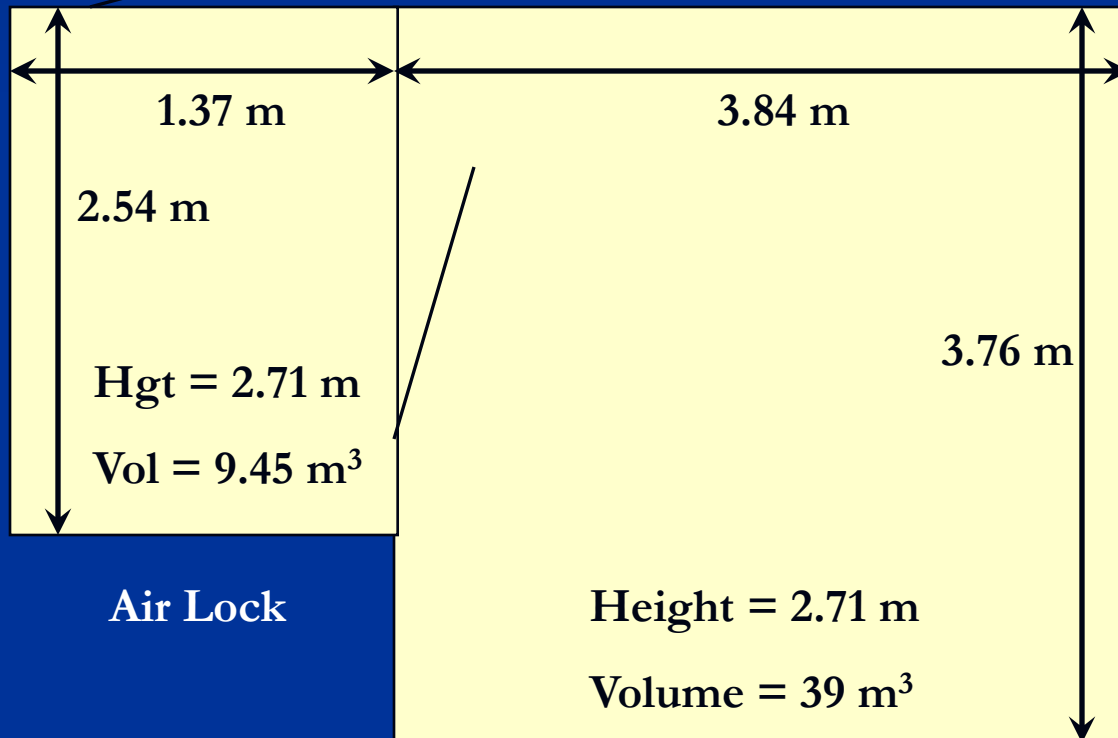
Bowser-Morner Radon Chamber



Bowser-Morner Radon Chamber



Chamber Layout (Similar to EPA/Las Vegas)



Radon Sources



Radon Measurement System



Three Eberline SACR-5
Photomultiplier Tubes/Scintillation
Cells

Tennelec Electronics and Counting
System (soon to be replaced with more
modern equipment)

Chamber Interior



Chamber Interior



RDP Exposures

- Requires introduction of aerosol into chamber.
- Our present methods of aerosol production, monitoring of RDP concentration and data handling are antiquated and very labor-intensive.
- I have tried to discourage the use of RDP measuring devices for home measurements.
- But RDP measurements are important in occupational settings.

RDP Exposures

- If there is sufficient interest (i.e., a MARKET) for calibration and testings of RDP measuring devices in regards to occupational settings, homeland security issues, etc. we could update our facility (requiring a substantial investment).
 - Better aerosol generator and control of aerosol concentration
 - Modern monitoring equipment including automated calculations and data transfer (reducing labor).