NATIONAL RADON SAFETY BOARD
A PROPOSED PROSPECTUS AND BY-LAWS

Raymond Johnson
American Association of Radon Scientists and Technologists
Kensington, MD

ABSTRACT

The Environmental Protection Agency has indicated for two years that it wants to privatize its Radon Proficiency Program. In response to radon industry concerns for continuity of a high quality proficiency program, the American Association of Radon Scientists and Technologists has developed a proposal for a radon certification board. A prospectus and bylaws for the National Radon Safety Board (NRSB) have been drafted using the model of the American Board of Health Physics, which has successfully certified health physicists as practitioners in radiation safety for 35 years. The NRSB will be an independent, non-profit board of 12 - 14 volunteers representing broad categories of radon stakeholders, including states, federal, and industry. An Advisory Council will be established to represent all other interested stakeholders and the Council will provide two representative on the NRSB. The purpose of the NRSB is to assure the competency of national programs, individuals, devices, laboratories, and mitigation services for preventing unnecessary radiation exposures from radon and radon decay products. The work of the NRSB will primarily be conducted through four panels: an examination and certification panel, a certification renewal panel, a radon chamber and measurement device certification panel, and a protocols and standards of practice panel. The administrative operations of the NRSB will be conducted by a professional executive secretariat service. The Board will also have several committees including: nominating, public awareness, professional standards, ethics, enforcement, and appeals. The Board will establish requirements and certify radon testing devices, laboratories, radon chambers, radon testers, and radon mitigators.

INTRODUCTION

For ten years the U.S. Environmental Protection Agency (EPA) has provided a program for assessing the qualifications of 1) individuals, who offer radon testing and mitigation services, and 2) radon and radon decay product measurement devices. Under this program (the Radon Proficiency Program)(RPP) individuals and devices that meet qualification requirements are "listed" by EPA. Since 1995 EPA has indicated an interest in privatizing this program. The American Association of Scientists and Technologists (AARST), representing the radon industry, is offering this proposal for a **National Radon Safety Board (NRSB)** as an alternative to the current RPP. This paper presents AARST's concerns for a privatized program and a proposed Prospectus and By-laws for the NRSB.

INDUSTRY CONCERNS

AARST has several concerns regarding EPA's initiatives on privatization. These include 1) credibility of radon services, 2) continuity of EPA's programs for radon proficiency, 3) quality of performance programs, 4) cost of performance programs, 5) opportunity for meaningful input by the radon industry, and 6) participation by the radon industry.

Credibility of Radon Services

EPA's current RPP provides a basis for the radon industry's credibility with all who are concerned with high

quality radon measurement and mitigation services. Listing by EPA provides an indication of performance qualifications for individuals and laboratories offering radon measurement services and for individuals conducting radon mitigation. The industry needs assurance that this performance verification service will continue whether offered by EPA or another entity. EPA's cooperative partners and states also need assurance, as they urge homeowners and schools to test and mitigate for radon, that high quality radon services are available. Lastly, homeowners need assurances that qualified radon measurement and mitigation services are readily available.

Continuity of EPA Programs for Radon Proficiency

The radon industry is concerned that the RPP may be discontinued due to budgetary or executive branch policy decisions beyond the control of the Indoor Environments Division. Some of these concerns arise out of budget stalemates and furloughs which caused interruptions in RPP services during 1995. Also, since 1995, the EPA Radon Division has been abolished and its components absorbed into the Indoor Environments Division. Consequently, on the organization charts, EPA no longer has a radon program. A number of key radon staff are no longer assigned to radon programs. Congress has debated about the future of federal radon programs and even the future of EPA. Numerous editorials over the past year have denounced the health effects of radon. For small businesses to survive in the radon industry, they need assurance of the continuity of some type of "stamp of approval."

Quality of Performance Program

For a "stamp of approval" to have meaning in the marketplace, it has to be supported by a high quality program that will satisfy critical evaluation by all stakeholders, i.e. EPA, states, cooperative partners, professional organizations, homeowners, the real estate industry, banks, and the radon industry. The radon industry, in particular, would like assurance that any continuing radon proficiency program will offer a quality of service at least equal to, or preferably better than, the current RPP. The radon industry's goal is to assure the highest quality radon measurement and mitigation services. Any program to evaluate the quality of these radon services must have similar high standards for quality. AARST is also concerned about whether the privatization process will be based on good science, good management, and good understanding of practical matters in the radon industry.

Cost of the Performance Program

Since much of the radon industry is comprised of individuals and small family business, the cost of performance evaluation services is a matter of concern. However, the industry is not just looking for a low cost program. Rather, the industry is looking for a program which offers a significant value added benefit to participants which is commensurate with the costs. Good business practices dictate that the industry will not willingly spend its limited resources unless there is a clear value in the marketplace. Members of AARST, as radon professionals, also have an added incentive to maintain and enhance their credentials for radon services as a matter of professional integrity.

Opportunity for Meaningful Input by the Radon Industry

Since the current RPP was developed and implemented by EPA, the radon industry has had to be content with very limited input into operations of the program or how resources are allocated. For members of the industry to support a privatized program, we would want assurance not only of high quality and commensurate costs, but also that we would have the opportunity to provide meaningful input into the operations of the program and how associated fees are allocated. This does NOT mean that the radon industry would insist on running a privatized program, but that the industry should have significant input. Since the industry will be paying for the program, it seems reasonable to expect to have meaningful input.

Participation by the Radon Industry

No matter how good a performance program may be proposed, its success will require participation by the radon industry, i.e. the program will not work without the substantial support of industry. The radon industry will also be paying the bill for performance evaluation services. Since participation will be voluntary, then each member of the radon industry has to decide if participation has an added value in the marketplace. Strategies for encouraging industry participation have to be considered carefully as part of a performance program proposal.

PROSPECTUS FOR THE NATIONAL RADON SAFETY BOARD

Since 1986, the U.S. Environmental Protection Agency (EPA) has provided a program for assessing the qualifications of radon and radon decay product measurement devices. Later this program was expanded to include individuals who offer radon testing and mitigation services. Since 1995, the EPA has indicated an interest in privatizing this program. To assure continuity of a radon performance credentialing service, the American Association of Radon Scientists and Technologists (AARST) is proposing that radon proficiency functions be conducted by an independent, non-profit board incorporated as the **National Radon Safety Board (NRSB).** The NRSB will "certify" individuals, test devices, laboratories, and radon chambers according to criteria established by the Board.

AARST offers the NRSB proposal to address several concerns including: 1) concerns of all radon stakeholders for continuity of a program for evaluating performance qualifications of individuals, laboratories, and radon chambers offering radon measurement services and for individuals conducting radon mitigation, 2) assurance of a high quality performance verification program, 3) the need for a program which offers a significant value added benefit to participants which is commensurate with costs, and 4) the opportunity for meaningful input by all stakeholders.

The model for the NRSB is the American Board of Health Physics (ABHP) which certifies health physicists as practitioners in radiation safety. The ABHP consists of a nine member Board of volunteers with the administrative duties provided by a professional secretariat service. This Board has been functioning successfully for 35 years and is internationally recognized as the premier qualifying body for radiation safety practitioners.

The NRSB proposal was first offered to state and federal representatives and other radon stakeholders at EPA's Sixth National Radon Conference in McLean, VA in November 1996. Immediately following that conference, about 15 stakeholders met informally on Saturday, November 23 for discussion of privatization options, including the NRSB proposal. The proposal was subsequently reviewed by the AARST Executive Committee and Board of Directors in February and again in April 1997. At the Board meeting in April, a decision was made to invite a broad cross section of stakeholders to convene in June 1997 for detailed review of the NRSB proposal. Invitations were sent to states (represented by the Conference of Radiation Control Program Directors (CRCPD)), the EPA, consumer groups, home inspectors, manufacturers, radon testers, radon mitigators, radon chambers, radon trainers, and AARST. Following this meeting, the original Prospectus and Bylaws were revised and distributed to meeting attendees for further review.

In September 1997, the CRCPD, under contract with the EPA, distributed the revised NRSB Prospectus and Bylaws to about 250 stakeholders who had previously indicated interests to the EPA. These stakeholders were invited to a meeting in Pittsburgh, PA on October 6 - 7, 1997 to discuss the NRSB proposal.

PURPOSES OF THE NATIONAL RADON SAFETY BOARD

The primary purposes of the NRSB are to:

1. Assure the competency of national programs, individuals, devices, laboratories, and mitigation services for preventing unnecessary radiation exposures from radon and radon decay products.

2. Establish and promote uniform standards and practice for radon measurements and mitigation.

3. Encourage the highest standards of practice, professional ethics, and integrity in radon services.

4. Determine the competence of professional radon testers and mitigators through education and examination requirements for certification by the Board.

5. Determine the performance of radon (and RDP) measurement devices by testing in qualified radon chambers.

6. Establish criteria for design and operation of radon chambers, and determine the performance of radon chambers by reference to the EPA and the National Institutes of Standards and Technology.

7. Certify qualified radon testers and mitigators, qualified radon measurement devices, qualified laboratories, and qualified radon chambers and maintain a registry of such certificates.

8. Promote continuing education and improvements in radon services and measurement devices to encourage high standards of practice.

9. Provide a certification renewal program for individuals demonstrating continued professional development and for devices meeting performance requirements, and for radon laboratories and radon chambers demonstrating quality assurance requirements.

10. Promote the use of NRSB certified individuals, devices, laboratories, chambers, and products.

MEANING OF CERTIFICATION

Certification for radon testers and mitigators means that the recipient has met requirements of study, professional experience, and examination for establishing competence in the field of radon services. Holders of these certificates may identify themselves as Certified Radon Testers (CRT) or Certified Radon Mitigators (CRM). It should be recognized that the certificate awarded by the Board is not a license and, therefore, does not confer a legal qualification to provide radon services. Certificate holders must still meet state requirements. However, certification by the NRSB should satisfy competency requirements for states with licensing programs.

Certification for radon measurement devices means that the devices and programs for producing radon test results have demonstrated requirements for performance and quality assurance. Devices and programs meeting the performance requirements may advertise that they are certified by the NRSB. Certification for laboratories and radon chambers means that these facilities have demonstrated requirements for design, operational procedures, performance, and quality assurance. Laboratories and radon chambers meeting the performance requirements may advertise that they are certified by the NRSB.

PROFESSIONAL RESPONSIBILITIES OF CERTIFIED RADON TESTERS AND MITIGATORS, RADON LABORATORIES, AND RADON CHAMBERS

Certificate holders will uphold high standards of professional integrity and ethics in relations with individuals, and groups, including clients, colleagues, government agencies, professional and trade associations, and the general public. Certificate holders have a professional and ethical obligation to follow accepted protocols for radon testing and mitigation and to offer only those radon services for which they are competent. To maintain technical competence, certificate holders have a commitment to remain professionally active in radon services and knowledgeable of scientific, technical, and protocol developments through continuing education.

Certified radon testing programs have a responsibility to use only certified test devices for which they are qualified. Certified radon testing programs will maintain rigorous quality assurance programs.

GENERAL REQUIREMENTS FOR CERTIFICATION OF RADON TESTERS (CLASS A AND CLASS B) AND RADON MITIGATORS*

1. **Training** - Applicants for Class A certification as radon testers should have completed 16 hours of training in a course, such as the EPA Radon Measurement Operator course. Applicants for certification as radon mitigators should have completed 32 hours of training in a course, such as the hands-on course Radon Technology for Mitigators developed by EPA.

2. **Experience** - Applicants for radon tester Class A certification should have one year of responsible radon testing experience, including field supervision by a certified radon tester. Applicants for radon mitigator certification should have one year of responsible radon mitigation experience, including field supervision by a certified radon mitigator.

3. **References** - Applicants for Class A certification should be currently engaged in radon testing. Applicants for radon mitigator certification should be currently engaged in radon mitigation. Two references are required: one from the applicant's supervisor and/or one from another person, or persons, qualified to evaluate the applicant's ability to perform high quality radon services. It is recommended (but not required) that one of these references be a person already certified by the Board.

4. **Examination** - Anyone who meets the study and experience requirements and is providing radon testing or mitigation services in a competent and ethical manner is urged to apply for the examination. Although satisfactory performance on the written examination is not the only requirement for certification, persons who are admitted to and perform well on the examination usually receive a certificate from the Board.

5. **Provisional Certification** - Persons meeting training and examination requirements, but not the experience requirements, may be considered for provisional certification until they meet the experience requirements.

6. **Board Approval** - The Board will evaluate study and experience requirements, references, and performance on the examination as a basis for granting certificates. Any applicant denied certification may appeal the Board action by contacting the Executive Secretary in writing within six months of notification of results.

7. **Class B Certification** - Persons applying for certification for radon testing who only place and retrieve measurement devices for which someone else performs the analysis (such as activated charcoal devices) may not have to meet all of the requirements listed for Class A certification.

GENERAL REQUIREMENTS FOR CERTIFICATION OF MEASUREMENT DEVICES*

1. Radon and radon decay measurement devices will pass performance tests in a qualified radon chamber.

2. Measurement programs using certified measurement devices will demonstrate appropriate quality assurance results.

---

* Individuals currently listed by EPA or meeting comparable state requirements may be considered acceptable for certification by the Board.

GENERAL REQUIREMENTS FOR CERTIFICATION OF RADON LABORATORIES AND RADON CHAMBERS

1. Radon laboratories and radon chambers will demonstrate appropriate design and operational criteria to achieve high standards of practice.

2. Radon laboratories and radon chambers will demonstrate performance through blind tests and intercomparisons with other qualified laboratories or radon chambers.

3. Radon laboratories and radon chambers will demonstrate ongoing quality assurance results.

REVOCATION OF CERTIFICATES

Certificates for radon testers and mitigators may be revoked for actions considered by the Board to be in violation of the statement "Professional Responsibilities of Certified Radon Testers and Mitigators." Any person for whom such action is contemplated shall have the right of appeal to the Board.

Certificates for radon measurement devices may be revoked for failure to meet performance requirements. Radon testing programs may lose certification for failure to use a certified test device or failure to meet quality assurance requirements.

Certified radon laboratories and radon chambers may lose certification for failure to demonstrate performance requirements or to maintain a rigorous quality assurance program.

CERTIFICATION RENEWAL

A certification Renewal Program is sponsored by the Board to ensure that certified radon testers and mitigators are fulfilling professional responsibilities through continuing education and improvements in radon services. To remain certified, individuals must renew their certification every two years. The requirements for renewal are;

1. To be engaged in professional radon related services

2. To have earned, during the preceding two years, sufficient continuing education credits by participation in approved courses, meetings, or other activities

3. To have met such other requirements, including payment of fees, as may be imposed by the Board.

The Certification Renewal Panel will review courses and other continuing education options, submitted by course organizers or by the certified person seeking continuing education credits, to determine the number of continuing education credits to be awarded.

Certified radon laboratories and radon chambers must renew their certification every two years and meet quality assurance performance requirements.

---

* Devices currently listed by EPA or meeting comparable state requirements may be considered acceptable for certification by the Board.

ADMINISTRATION

The NRSB will retain the services of an Executive Secretary to maintain the national NRSB office. The Executive Secretary will perform administrative functions including normal correspondence, accounting, bookkeeping, financial reporting, record keeping, and processing applications for certificates and renewals.

BYLAWS OF THE NATIONAL RADON SAFETY BOARD

Article I. Name

1. The name of the organization shall be the National Radon Safety Board, which herein after shall be designated as the Board.

Article II. Objectives

1. The primary objective of the Board shall be the development of standards and procedures for certification of radon testers and mitigators, the development and administration of examinations leading to certification, the awarding of certificates, the issuance of written proof of certification to individuals who satisfy requirements for certification, and the revocation of certification. The Board shall also develop standards and procedures to establish that certified radon testers and mitigators are knowledgeable of new developments in the profession through continuing education and have remained active in providing radon services.

2. The Board shall also develop standards and procedures for certification of radon (RDP) measurement devices and the programs that produce radon test results, evaluate the performance of test devices and programs, award certificates to devices and programs that pass performance requirements for certification, and revocation of certificates. The Board shall also develop standards and procedures to establish that measurement devices and programs continue to achieve performance and quality assurance requirements.

3. The Board shall develop standards and procedures for certification of radon testing laboratories and radon chambers, award certificates to those facilities that pass performance and quality assurance requirements, and revocation of certificates.

4. The Board shall develop protocols and standards of practice for radon measurements, radon mitigation, radon laboratories, and radon chambers.

Article III. Membership

1. The membership of the Board shall be at least eight (8) and not more than fourteen (14) members elected by the Board (see Figure 1). There shall be a Board member representing each of the following categories of stakeholders: federal (US EPA), states (regulatory and non-regulatory) (Conference of Radiation Control Program Directors), radon testers, radon mitigators, radon chambers, radon trainers (Regional Radon Training Centers), radon product manufacturers, radon industry (AARST), home inspectors, and an Advisory Council (representing all other interested radon stakeholders)

2. Board members shall be certified in radon testing or mitigation.

3. Board members shall act as individuals and not as representatives of any organization and shall receive no compensation for services from the Board.

4. The term of office of each Board member shall be three (3) years beginning January 1 following election to the Board. Terms of office shall be staggered to minimize the number of vacancies occurring in a given year.

5. The NRSB Nominating Committee shall seek qualified candidates from the above categories of radon stakeholders and shall nominate one or more persons for each vacancy to assure a balance of Board representation among the stakeholder categories. Election to the Board shall be by majority vote of the total membership of the Board from the nominations submitted.

6. When a member of the Board is unable to complete a term of office for any reason, the Board shall, by majority vote of the remaining members, elect a replacement for the remainder of the term.

7. A Board member may be removed from the Board for unethical conduct or other just cause (such as missing two (2) consecutive meetings) by a three-quarters vote of the total membership of the Board.

8. No person shall be elected to the Board within a period of one year following conclusion of a full term of office on the Board.

9. Members of Board appointed panels or committees may sit with the Board without voting privileges.

Article IV. Officers

1. The officers of the NRSB are the President, President-elect, Past President, and Secretary/Treasurer elected from members of the Board by a majority vote of the NRSB members voting. The President-elect shall succeed to President and Past President during a three year term.

2. The President shall preside over the meetings of the Board, and shall appoint necessary panel and committee members with the approval of the Board. The President shall also administer the business affairs of the Board, delegating duties to other members or the Executive Secretary as appropriate.

3. The President-elect shall perform such duties as delegated by the President and, in the absence of the President, shall assume the duties of the President.

4. The Secretary/Treasurer shall keep a record of all meetings of the Board and provide an accounting of all financial transactions of the Board with the assistance of an Executive Secretary as authorized by the Board.

5. The term of office for the President-elect shall be one year starting January 1 following election. The President-elect then becomes President for one year and Past President for one year. The Secretary/Treasurer shall serve for one year as Secretary/Treasure-elect and then for two years as Secretary/Treasurer.

6. The Secretary/Treasurer of the Board and such other persons as may be designated by the Board shall be bonded in an amount as shall be determined by the Board and by a bonding company approved by the Board. Expense of bonding will be borne by the Board.

Article V. Meetings of the Board

1. There shall be at least one meeting of the NRSB each year.

2. The quorum for a meeting of the NRSB is a majority of the members.

3. Except as provided elsewhere in this Article, all actions and decisions made at meetings of the NRSB shall require a simple majority of those members present and voting. There shall be no absentee voting or voting by proxy.

4. Additional meetings of the Board may be called by the President or by request of a majority of the members.

Article VI. Rules of Procedure

1. In questions pertaining to conduct of meetings of the Board, not covered by the Bylaws or formally established policies of the Board, *Robert's Rule of Order* shall prevail

Article VII. Financial

1. The Secretary/Treasurer is responsible for proper accounting of all assets of the Board. The Secretary/Treasurer may be assisted by the Executive Secretary as authorized by the Board. The duties of the Secretary/Treasurer include:

   a. Billing and collecting all funds due the Board.
   b. Paying all obligations of the Board.
   c. Assuring administration of the Board's funds in accordance with the approved budget.
   d. Keeping a proper account of all financial transactions of the Board and submitting an annual report, properly audited.
   e. Transferring all funds and properties of the Board to the new Secretary/Treasurer
   f. Overseeing investment of Board funds according to established policy.

2. Fees related to certification and renewal of certification shall be established by the Board.

Article VIII. Panels and Committees

1. The Board shall establish the following Panels and Standing Committees (see Figure 2):

Panels

   a. Examination and Certification Panel
   b. Continuing Education and Certification Renewal Panel
   c. Radon Chamber and Measurement Device Certification Panel
   d. Protocols and Standards of Practice Panel

Committees

   a. Nominating
   b Public Awareness
   c. Professional Standards and Ethics
   d. Enforcement
   e. Appeals

2. Other Panels or Committees may be established for efficient administration of Board affairs.

3. Members of Panels, Committees, and their Chairs are nominated by the President and approved by the Board.

4. The term of a Committee or Panel appointment is three years. Additional terms may be allowed following review by the Board. Committee and Panel Chairs are appointed for a one year term, but may succeed themselves in office.

5. Members of Panels and Committees will have staggered terms so that one third of the membership is changed each year.

6. Members of certification panels for radon testers and mitigators shall be appropriately qualified for their panel as determined by the Board.

Article IX. Advisory Council

1. The Advisory Council will be established to provide the opportunity for Board representation by a broad cross section of radon stakeholders not otherwise represented on the Board. Anyone interested in representation on the Board may participate in the Advisory Council. The Advisory Council and its programs will not be funded by the Board.

2. The Advisory Council may nominate two members to the Board.

3. The Advisory Council will serve as a forum for broad stakeholder input to the Board.

4. The Advisory Council will assist the Board in achieving broad stakeholder support for Board programs.

5. The President of the Board will convene a meeting of the Advisory Council at least once a year to brief the Council on Board activities and to seek advice from the Council.

Article XI. Certification Procedures

1. Applicants for certification shall apply to the Board on forms designated by the Board.

2. Applicants for certification as radon testers and mitigators shall pass an examination approved by the Board.

3. Applicants for measurement device certification shall submit results of performance and quality assurance testing.

4. Applicants for certification of radon laboratories and radon chambers shall provide design and operational criteria for their facility and quality assurance results.

Article XII. Amendments

1. The Bylaws may be changed by a two-thirds vote of the Board.

Figure 1

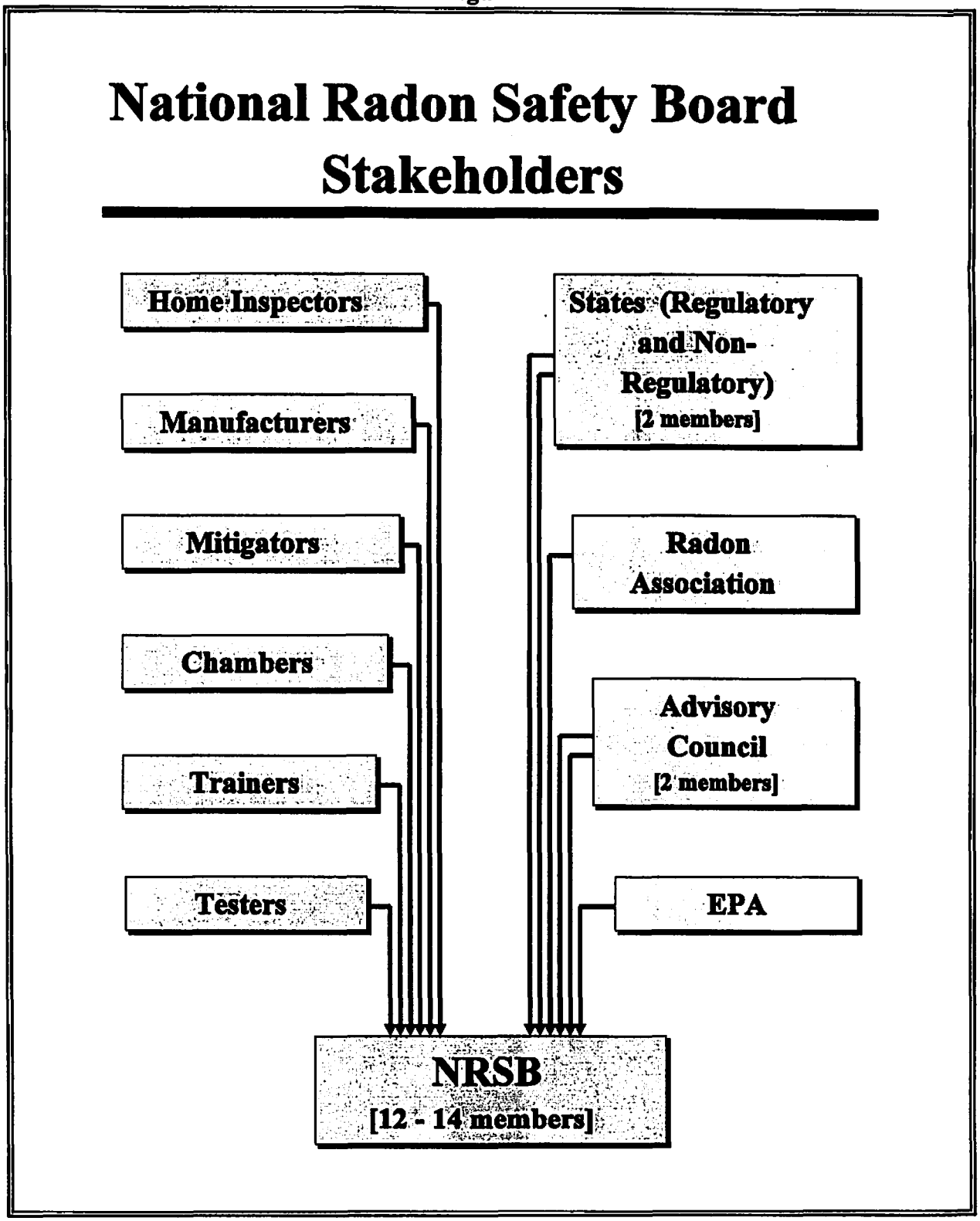
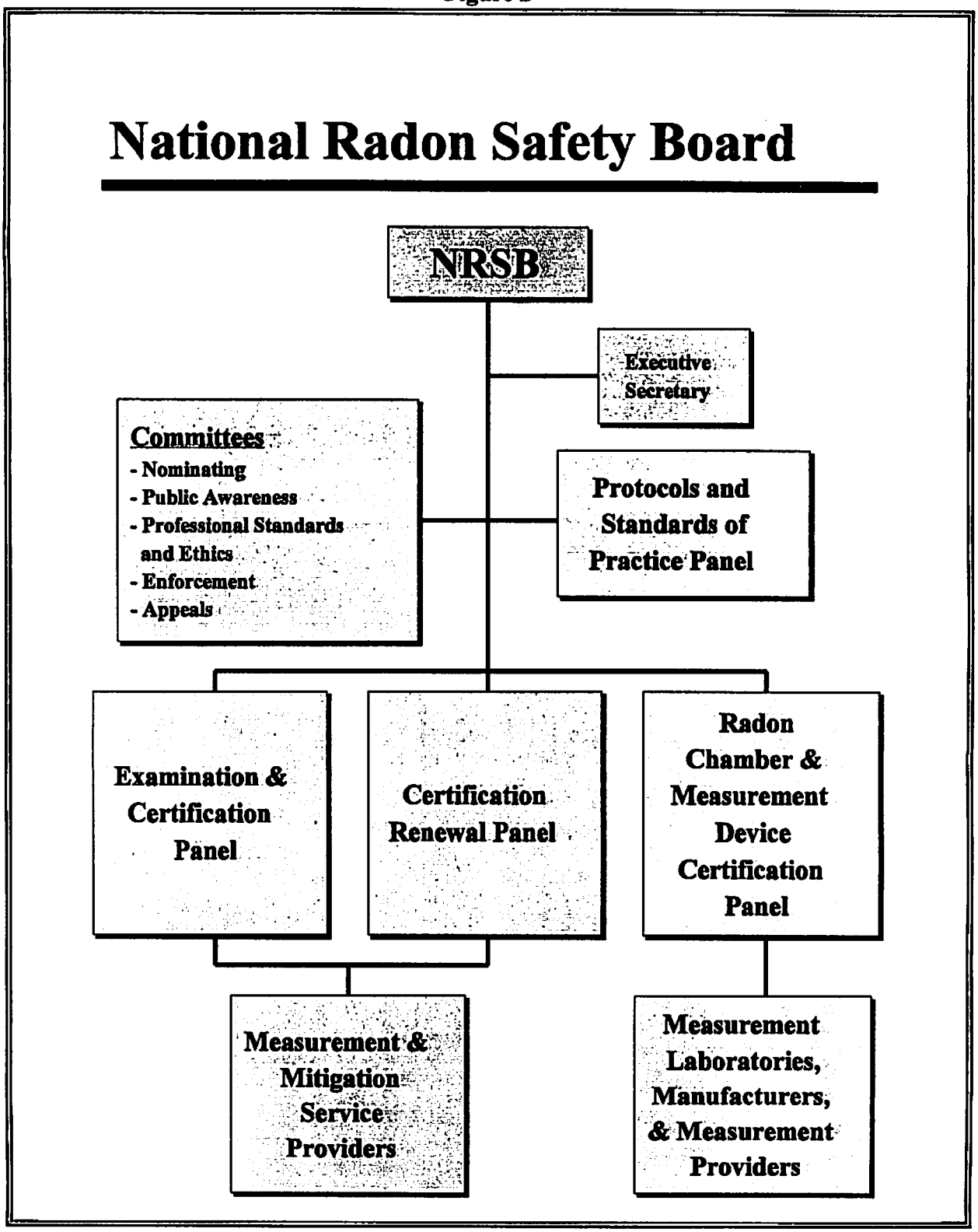

National Radon Safety Board Stakeholders
Home Inspectors
Manufacturers
Mitigators
Chambers
Trainers
Testers
States (Regulatory and Non-Regulatory) [2 members]
Radon Association
Advisory Council [2 members]
EPA
NRSB [12 - 14 members]

Figure 2


National Radon Safety Board
NRSB
Executive Secretary
Committees
- Nominating
- Public Awareness
- Professional Standards and Ethics
- Enforcement
- Appeals
Protocols and Standards of Practice Panel
Examination & Certification Panel
Certification Renewal Panel
Radon Chamber & Measurement Device Certification Panel
Measurement & Mitigation Service Providers
Measurement Laboratories, Manufacturers, & Measurement Providers