

**Radon Stakeholders Consensus Building Dialogue**  
**Las Vegas, Nevada**  
**September 13, 2008**  
Final Meeting Summary

**Attendees**

*USEPA:* Bill Long, Phil Jalbert, Tom Kelly, Larainne Koehler

*State Radon Programs:* Josh Kerber, Francesca Provenzano, Mike Pyles, Bob Stilwell, Adrian Howe

*National Environmental Health Association – National Radon Proficiency Program (NEHA-NRPP):* Angel Price, Heidi Shaw

*Conference of Radiation Control Program Directors (CRCPD):* Curt Hopkins

*AARST Consortium on National Radon Standards:* Gary Hodgden

*American Association of Radon Scientists and Technologists (AARST):* Bill Angell, Peter Hendrick, Phillip Jenkins, Dick Manning

Observers: Jed Harrison, Emilio Braganza, Dave Kapturowski, Terry Howell, Stan Liebert, Bruce Snead, Brad Nyberg

**Action Items:**

- Continue efforts to communicate and coordinate with each other, especially in response to questions or concerns, as appropriate
- Cooperation/coordination between AARST and CRCPD efforts on radon in granite
- Q/A work group to convene, led by Josh – include other state representatives as appropriate, address barriers and incentives to raising the bar for professionals

**Topics for future discussion:**

- Recruitment and preparing the next generation
- Environmental Justice
- Collaboration/input to EPA on long-term radon strategy
- Revisit membership/charter of stakeholder group
  - New/rotating membership?
  - Add representatives from Canada?
  - Rethink group goals/mission?

**Introductions and Welcome:** EPA and facilitator welcomed everyone, and briefly reviewed the history, goals, and ground rules for the group. The presence of observers was noted, and it was explained that they would have an opportunity to contribute their general comments at the end of the day. The facilitator reviewed the agenda.

**Updates on Action Items and Progress so far:**

### **Response to inquiry to EPA Lab:**

At the April stakeholder meeting, the group requested that Phil Jenkins draft a letter to the EPA Lab director Jed Harrison to inquire about the possibility of a disruption in access to the lab during the building of a new chamber, a request for commitment to ongoing international intercomparisons, and a clarification of Lab policy on intercomparison process with other labs (public and private). This letter was drafted and sent to the dialogue group for comment, and then sent to Jed.

Jed sent a response on behalf of the lab, which was given to meeting participants (attached). Phil Jenkins presented the letter, and thanked Jed for his response and attention. Jed then answered questions from the group.

Jed clarified that a new facility was being built which would include two radon chambers, and that the existing chamber would not be shut down until well after one or both of the new chambers were up and running.

- A participant asked whether the lab would be hiring new staff to go along with the new chamber capacity. Jed responded that this was not planned at the moment, but if it became necessary, they could do so. He informed the group that the lab had just received some additional money from EPA HQ, for which he thanked the group for highlighting the importance of the Lab's work and role in the radon community.
- On the topic of national intercomparison, Jed announced that they had just completed an intercomparison with the state of PA
- Regarding International Intercomparison, they were making preparations to host one in future by renovating systems in current chamber.
- Meanwhile, the lab was committed to participate in international intercomparisons hosted by others when the opportunity comes up. There had been discussions with a chamber in China, but they are not quite there yet. If opportunity with EU, they would like to participate.

A question was asked about the Lab's relationship with NIST. Jed explained that the Lab did performance evaluations with them, but have not done a formal intercomparison. NIST doesn't have the right system at the moment to allow for that. However, if there is a call for us to formalize intercomparison with NIST, they can consider how to do that.

Jed and Emilio were asked whether the Lab planned to remain the National Reference Lab for Radon. They responded that the Lab had not set out with that goal, but that they felt pleased to be seen that way. They said that they want to assume that role, and want to do what is needed to fulfill the needs for which they are relied upon. This would include 1) establishing direct traceability to NIST, which NIST has to solve and 2) integrating into international intercomparisons.

There was a discussion about how much had been learned about intercomparisons in the past 5 years. For example, there was a historical disagreement among labs on the order of 7 to 9% related to scintillation cell intercomparisons that stemmed from altitude problems, that they now can correct for.

A question was asked about whether it is possible/smarter to go straight to international intercomparison if the NIST issue can't be solved. The lab responded that they are pursuing both.

It was asked whether there was something this group can do to help the lab achieve these goals. They replied that they don't know off hand. One issue is that they currently don't have a seat at the international table, and would be open to help on that if something can be done.

**Calibration:** The group discussed Calibration and the need for Q/A. From the perspective of a manufacturing stakeholder, calibration is not enough. You can say that a unit is calibrated, but it doesn't mean a thing unless we're checking it. Need Q/A.

One stakeholder from a state perspective stated that they don't feel real comfortable with just calibration. They noted that there were not enough inspectors, and still they found a lot of bad stuff.

It was noted that there are a lot of good devices and testing, but unless you check them you don't know. They may be getting bad numbers from calibrations. Need proficiency of person and of device.

The group felt that having all these people here to address these issues was a sign of progress. The question was how to build that momentum.

### **Q/A for Professionals**

Josh took the lead on a discussion on Q/A for Professionals:

He reported that he hasn't had time to convene working group, but did have some informal discussions with a few labs and manufacturers.

The purpose is to increase Q/A for testing professionals (not focusing on mitigation here), and the question is How do certification programs ensure that people are doing Q/A?

- I asked NEHA-certified labs on spikes, way low (should be high)
- We find people who haven't done Q/A, they say "fine, can I sign some form?" or go to new state.

A question was raised about standards: What are the Qualifications for chambers w/ NEHA certification? What is the process for blind spikes – how are they done, how are they interpreted? We need to have something to go to industry with – what you have to do. i.e. calibration requirements (no "24-hour turnaround for \$100").

In Ohio law, schools need to be tested. The EPA Device Protocol says that you need to do spikes, but the schools document only references (not requires) spikes. Then there are the training issues – how much Q/A covered, how much is retained? People don't want to pay for it.

It was stated that NEHA requires a Q/A plan on application, and Q/A results every year. Someone suggested a requirement of reviewing the Q/A plan.

The group agreed that professionals should be doing Q/A to retain certification, and discussed the challenges of creating the incentives to make it happen. The proficiency programs require it, but don't have systems for enforcement. If only one of the proficiency programs adds more enforcement requirements, professionals might just quit and join the other program, or none (in states where it is not required). It was asked, if NEHA were to raise the bar, will States and EPA recognize their commitment over NRSB? *It was recognized that the issue of incentives and rewards for individuals and proficiency programs who comply with higher standards would be necessary in order to successfully address this issue.*

Commitments to work on the working group: Josh, Dick, Shawn Price, Gary (as assistant), someone from EPA HQ. It was mentioned that other states, including non-regulatory states, might have interest & capacity: For example, Pat Gardner of NJ (as a regulatory state). It was also noted that there was a need for both certification bodies' participation.

Someone suggested the need for a voluntary consensus-based process for requirements and enforcement that everyone could sign on to, and suggested using one of the ASTM/ANSI processes to do it. However, some states who already have high standards were concerned about the idea of a national standard that might be less rigorous.

EPA was asked about official recognition of professional proficiency programs. They replied that at the beginning, there was an official recognition that NRSB and NRPP were substantially equivalent to the EPA program in terms of protecting public health, but that currently, there is nothing official. However, there is an implicit recognition of the two programs. EPA stated that they couldn't endorse proficiency programs. State representatives stated that many states accept NRSB and NRPP because EPA historically and implicitly recognized them.

NEHA-NRPP representatives informed the group that they were applying for ISO accreditation for their proficiency program based on existing international standards.

### **Interim standards**

Laraine looked to see if states that had performance testing requirements also had standards for chambers, which might serve as interim standards for chamber calibration. She found that they seem to leave that to the proficiency programs and will accept proficiency tests done in chambers that the proficiency programs approve.

It was noted that calibration standards and device evaluation go hand in hand, along with chambers. Phil Jenkins is working on guidance documents for calibration and chambers; these documents could ultimately become standards upon going through the proper process.

It was noted that there was a need to guide NRPP on certifying chambers – they currently don't certify chambers for calibration. Phil Jenkins agreed to look through archives for documents that underlie the initial EPA protocols – will be involved/assist. NEHA/NRPP does have criteria for certifying chambers for doing performance testing.

### **Reconciliation of E2121 and AARST RMS**

Gary gave an update on AARSTs standards:

- The multifamily standard went out for public review. Comments were reviewed by committee, and there will probably be another public review. Then, the technical committee decides.
- Some ISO standards are being proposed that are not in harmony in the US. For example, the measurement protocol is a European protocol, which suggests a 2-month test minimum (EPA is 2 days). No one in the U.S. is involved on this (besides Gary), and there is a need for more involvement to address the issue of competing U.S. and International standards
- Home measurement protocol – move towards ANSI certification
- Large building measurement – need committee soon

**Mitigation:** There hasn't been any word about a new chair for the ASTM subcommittee, which was promised on June 15. The next E-06.41 meeting in Miami is in three weeks. As ANSI approved processes, ASTM and AARST are required to seek harmonization of these documents if possible. ASTM will have to say whether to harmonize or not. If not, the Consortium will go forward on ANSI approval with our standard.

Participants expressed thanks to Phil Anthes for his work on the mitigation standard, and for his willingness to fight for what he thought was valuable. The fact that people are so concerned about openness was a sign of how important the work is. The group also expressed thanks to those willing to be critical and push to make the standards better.

A question was asked about how training courses currently deal with the two mitigation standards. It was stated that the training centers had a meeting to go through the mitigation course material to reflect both sets of standards. A review of the two standards finds that they are 90% same, 5% different but noncontradictory, and about 5% contradictory. The courses note the differences, and the exams reflect both. The PAB at NEHA reviews the exams for their technical effectiveness, not their content.

The group then had a discussion about the state list serve, and how to respond to comments that refer to industry or AARST given that industry is excluded from that list serve. This issue arose due to responses to concerns about granite, where questions/rumors about AARST actions were posted. AARST stated their dismay that they did not get a call from States to ask "what is your position?" The issue raised concerns about communication protocols and transparency. It was noted that this revisited old wounds of miscommunication and mistrust among the groups.

The group spoke briefly about the granite issue to clarify the actions taken and proposed that it would be better for AARST and CRCPD to combine forces to move forward on the topic.

One participant expressed that there was a lot of communication around the granite issue and acknowledged that communication between groups wasn't perfect, but that it was better than it used to be.

## **Standard Processes**

The group moved into a discussion about standard setting. The question on the table was whether all parties could commit to supporting any voluntary standard-setting process that met or exceeded the requirements of ANSI. It seemed that everyone was comfortable with that proposal for the setting of formal standards, with the addition that processes that followed a process less rigorous than ANSI would be evaluated on a case-by-case basis. It was requested that the previously brainstormed process principles include the sentiment that people should not have to travel in order to participate in standard setting, as a subpoint of the principle of “Reasonable access.”

A participant asked about the process for prioritization of standards for development for the AARST Consortium. Gary responded that they first focused on the basic needs, like measurement protocols, and that other standards were taken up based on interest – who will lead and who will show up?

The group asked about the priorities for standards on radon in water. Gary replied that there was a chair, but not enough interest from stakeholder participants to get a committee together. It was noted that NJ was coming up with a standard for measurement of radon in water. It was noted that pieces of protocols for testing and standards for responding existed, but needed to be pulled together and then run through a consensus process.

It was noted that there were multiple places that groups could go to for an approval of their protocols. For example, the USEPA Water Office will approve your protocol.

The group then moved into a discussion of interim protocols. It was noted that there are a lot of pieces of standards lying around. People start up on a topic and then lose interest. These pieces are not necessarily reflective of consensus and are not complete. This becomes a problem.

#### **Chamber policy:**

PA did some intercomparison to get started and has been struggling with a policy. Since then, they wrote another policy and seek to get input from stakeholders. It was suggested that PA post their draft policy and get comments. There was also a suggestion that the consortium could serve as forum to get this document revised and published.

#### **Radon in water**

EPA was asked if they were ever going to do anything with the proposed rule? The EPA representatives stated that were not the right EPA people to answer that question. A discussion raised the sense that there was currently a standoff, since the law says there will be a rule, but the issue is largely regional. It is part of the Safe Drinking Water Act. To get a rule, citizens could sue or Congress could demand it. A report to congress is required, but the existing material is sitting at OMB.

One participant asked what people were hearing about the market for radon in water?

- BIG in CT, ME. Nonexistent in Ohio, some in PA. Regional regulation vs. not required

Participants explored whether they could get enough people to work on this? To have enough representation, there would need to be at least 2 states to work on it. It was suggested to talk to Pat Gardner (NJ) – may be a starting point.

The group discussed the challenges, including the complexity of the issue. It was noted that there were 15 different possible angles, such as determining the contaminant level, measurement process, reference standards, procedures on how to do scintillation, and then how to interpret the information.

### **Other organizations needing contact**

- Phil reported that the Health Physics Society was reworking its Position Statement on radon, which he expected to be a vast improvement.
- Air Monitors Users Group – More and more interested in radon, due to more uranium mining. They revitalized interest in ANSI standards on decay product devices and radon measurement devices. This group is mostly DOE, DOD, manufacturers, DHS. They measure plutonium and are interested in the interference of radon in this. They are also interested in occupational monitoring, and writing standard for radon decay products. Phil attends their meetings.
- CRC Handbook on Air Monitors – Phil is contributing a chapter on the behavior of radon, which needs to be finished in the next few days. Phil is also reviewing a chapter on radon measurement methods.

### **Other Topics:**

A question was raised about Environmental Justice concerns. A comment was made that, from the regional standpoint, emphasizing testing for those without the ability to mitigate doesn't serve anyone's purpose. Furthermore, providing free test kits was not effective, as they were often not returned. In order to put more emphasis on testing in EJ communities, there needs to be a plan for managing the high radon levels that might be found. The group agreed to continue discussion of this topic later.

The topic of the “aging” of technical expertise in the field was raised, regarding the technical capacity of the younger generation. This was tabled for discussion at another time.

EPA raised a question about the appropriate process for them to respond to requests for information from citizens and institutions. This came from a case in which they were contacted by a school and asked their opinion about mitigation choices. The school had a long-standing radon problem, had worked with the State, and with a private contractor. The school was deciding between source-control methods and filtration methods. The issue had become very public and very politicized, and rose to the attention of the Lieutenant Governor. EPA tried to give assistance. They first suggested contacting the EPA Region, but the request came back to HQ. Eventually, EPA wrote a letter back to the parties, stating their policy that it was better to address the source. EPA wanted to hear from the group whether they thought EPA handled this the right way.

The group unanimously responded that they agreed with EPA's substantive answer, to fix the problem at the source of radon entry, and felt that this was consistent with EPA's Indoor Air Policy. They also felt comfortable with the process, given that the state and the region were already in the loop.

EPA then stated that the EPA Office of Inspector General suggested augmenting their radon strategy with a long-term strategy, and asked the dialogue group to think about how it wanted to be involved in that.

Participants also mentioned the "Radon Leaders Saving Lives" web portal that was jointly developed by EPA, AARST, and CRCPD, which was about to be launched at the National Meeting.

A question was raised about adding Canadian representation to the Stakeholder Dialogue group. A suggestion was to provide two seats, including a national and provincial representative. However, some participants shared concerns that this might change the nature of discussion and work for the group, given its inclusion of relational issues relevant only internally.

The suggestion was raised that maybe there was a need to adapt the purpose of this group from its original purpose. It was noted that the dialogue started as a group with active grievances; whereas, now this was maybe 20% of the group's focus.

### **Comments from Observers**

- Something profound just occurred: EPA invited stakeholders to participate in setting long-term national policy. This is an exciting invitation.
- The group should keep in mind who should be at the table based on the topics for discussion. For example, today it was talking about chambers, so makes sense for the Lab to be here. On EJ issues, don't forget to involve tribes. Consider how one gets on and off the group.