DRAFT Minutes of the Radiation Protection Advisory Committee (RPAC) Meeting 10th Floor Conference Room Rachel Carson State Office Building, Harrisburg, PA April 19, 2018

Call to order - 9:03 a.m.

Members in Attendance:

John Keklak Victor Rizzo Kent Lambert Shawn McNeely Paul Houle Steven King Margaret Blackwood Michael Sheetz Anthony Montagnese Peter Smith Joseph Och Vincent Roding

Members Absent:

Janice Wirth Eric Boeldt

Charles Chambers

Marian Wolford Tiffany Whitcomb

DEP Staff in Attendance:

David Allard John Chippo Kristina Hoffman Dyran Altenburg Neil Bakshi Lisa Funk Keith Salador Bob Lewis Joseph Koshy Lee Ann Murray

Guests in Attendance:

Kendall Berry Karen Colucci Cheryl Rickley Joseph Melnic

Introduction; Adoption of Agenda; Approval of Minutes:

Introductions of members, guests and staff were made. The agenda for this meeting and minutes from the October 19, 2017 meeting were approved unanimously with the following minor edits relating to the discussion on RT licensure: remove reference to the incident in Florida that Representative Cutler spoke and replace with "Based on safety concerns"; change the language "vascular surgeons" to "some physicians, i.e. vascular surgeons"; change "operation" to "equipment"; and add the language "proposed bill does not address those concerns."

Open Floor:

Mr. Och, Ms. Colucci, Mr. Sheetz, and Mr. King offered a brief PowerPoint presentation regarding extremity dose correction factor. This presentation will be posted on the RPAC webpage for this meeting. The medical community continues to struggle with hospital infection control staff regarding wearing jewelry or extremity dosimetry in sterile settings. A typical policy

would be to wear nothing from the elbows down to prevent infections in these environments. However, there are occupational dose limits for extremities, and licensees are required to monitor the occupational exposure if they are deemed likely to obtain more than 10 percent of the dose limits to extremities. There is a concern from hospital infection control staff that these dosimetry devices can cause infection, and sterilizing these ring badges is impractical. NCRP 168 makes 31 recommendations about the use of personal dosimetry during fluoroscopy and urges monitoring of dose to the eye, but makes no recommendations on wearing extremity monitors. The use of a correction factor to estimate these readings is not uncommon, and there are several papers regarding development of correction factors for fluoroscopy. Ms. Colucci offered, by recommendation of RPAC to use a conversion factor of 2.5 in lieu of extremity dosimeters based on data gathered and presented. DEP regulations do not specify ring dosimetry, just dosimetry. Therefore, it is just a question of this methodology to assess acceptable dose. A motion was made and seconded to draft a recommendation letter to DEP and include the results of the survey that was presented to DEP to deem this correction factor as an acceptable methodology to meet the regulatory requirements.

RP Program Update:

BRP is currently developing and reviewing its budget/spend plan for this year, and the three-year regulatory fee review is now due. The required three-year review of nuclear power plant fees was completed without the need for an increase. Ten of 15 available positions have been lifted from the hiring freeze and are in the process of being filled.

Decommissioning/Environmental Surveillance:

- The Safety Light (old US Radium) site is in the final stages of decommissioning with all buildings removed and some soil issues including some material still being removed.
- Westinghouse Corporation in the Western Region is currently undergoing bankruptcy proceedings and has notified the Department of its search for a buyer.
- DEP has almost completed the NRC-provided list of old radium sites, with only a few remaining.

Nuclear Safety – Peach Bottom Atomic Power Station exercise occurred on April 17, 2018, with no major outlying problems. There is a Beaver Valley ingestion exercise scheduled for March 2019. The ingestion exercise had been on a 4-year cycle but is now on an 8-year cycle. The recent news on TMI Unit 1 and Beaver Valley Power Station Units 1 & 2 possibly shutting down was briefly discussed.

Radon – The Radon Division is continuing to gather data from the residential development in eastern Pennsylvania with high levels and is involved in both re-entrainment and ambient air studies.

Radiation Control:

Licensure for Radiologic Technologists – Ms. Rickley CNMT, Pennsylvania Technologist Advocacy Group representative, stated a PA Society of Radiologic Technologists (PSRT) committee meeting occurred to present reasons why this bill has been drafted, and two lobbying days have been scheduled in June to support this bill. A concern on the cost of licensure was raised with no answer known as yet. The six states surrounding Pennsylvania have this licensure requirement, and the fees range anywhere from \$50 to \$150. Mr. Montagnese attended the meeting and was surprised to find that many representatives were ignorant of the

issues surrounding this matter. He also noted some organizations oppose the bill, one group being cardiovascular technologists, because they don't have the training background for this type of licensure. Mr. Keklak mentioned that the letter of support from Dr. Keith Hadit, which was briefly discussed, seems to imply the bill is attempting to include physicians as well, and this is a concern; however, the RPAC doesn't think it's the intent of the bill. Ms. Rickley stated she would be happy to discuss any parts of the bill with anyone in attendance. Mr. Sheetz questioned the licensure vs. the new DEP certification requirements. Ms. Rickley noted the difference is that magnetic resonance and sonography, both non-ionizing, are covered under this bill. DEP, however, does not have authority over non-ionizing radiation. Members of RPAC noted that the new regulations, as far as ionizing radiation, seem to meet all of the same requirements of this licensure.

Medical Physicist (MP) Licensure – Mr. McNeely asked about medical physicist licensure in Pennsylvania. There currently seems to be an argument for and against licensure with a nonscientific poll showing 55% to 45% of MPs surveyed against licensure. Mr. King noted that only a few hundred physicists are affected by this, and it doesn't seem to be financially sound. DEP's discussions with the Department of State have noted it would cost thousands of dollars and require lawyers and a board to maintain licensure for MPs. Mr. Montagnese noted that the question was asked at the PSRT meeting if this licensure could be rolled into the RT Licensure Bill and, while Representative Cutler was receptive, the American Association of Physicists in Medicine(AAPM) was not.

O-Arm Device - Mr. King discussed the two O-arm devices he possesses that are registered as fluoroscopic devices. He mentioned the amount of radiation delivered is similar to a CT scan. Newly developed orthopedic pediatric protocols for using this device were then discussed that would provide adequate imaging to help in the placement of metal devices to straighten the spines of children. The FDA is developing performance standards because of this concern regarding dose delivered by these devices. The possibility of regulatory guidance was briefly discussed with the conclusion that current CT regulations, when applied, seem to adequately cover them.

Dexa Scanners – Use on humans for non-diagnostic purposes is currently not permitted except for certain medical research. Recently a fitness club chain approached DEP for approval to use this technology to measure fat composition. DEP will not permit this. The consensus of RPAC was that this is a frivolous use of radiation.

Review of Medical Reportable Events (MRE) and Nuclear Material Event Database (NMED):

John Chippo provided a verbal summary of five NMED events that occurred since the October 2017 meeting. Lisa Funk noted there was one MRE submitted for this period. Detailed written notice of these events will be provided to the Committee separately.

ePermitting and ePayment for Registrants and Licensees:

The Department is moving toward electronic systems as the integral method for issuing and receiving payment for all licenses and registrations. X-ray renewals are currently being processed in this manner with new registrations being the next step. Two steps are required to sign up. First, a registrant visits dep.pa.gov and creates a Greenport account. Second, they complete an Electronic Filing Administrator (EFA) agreement. Once registered, they can then

log in, view and adjust their tube inventory, pay their fee and print their renewal registration. Also, once registered, users can reprint lost certificates. A webinar was conducted to demonstrate this process, and it is available on BRP's website. RAM and Radon will eventually move to this system as well.

Status of Regulatory Revisions:

The final Radiological Health and Final-Omitted rulemakings will be presented to the Environmental Quality Board (EQB) on June 19, 2018.

Possible Future Regulatory Updates:

The next set of regulatory revisions will be those needed to address financial assurance in decommissioning, specifically sealed sources as noted in Category 1 and 2 licenses. Examples include abandoned sources at the Quehanna site and the abandoned cesium-137 irradiator in the Philadelphia area. For these revisions, DEP will rely on Part S of the CRCPD's suggested state regulations (SSR). Part S of the SSR will be published this summer. Another possible regulatory update package will stem from SSR Part H, dealing with radiation-generating devices, which has been completed and published for review. BRP will be reviewing Part H over the next year to determine what is appropriate to incorporate into DEP's regulations.

Regulatory Questions:

A few remaining regulatory questions were raised. One is whether maintaining an electronic copy of operating and emergency procedures in the operator area, as opposed to paper copies, is acceptable for the accelerator regulations. DEP sees no issue with this as RAM regulations already allow electronic use of procedures, etc.

Mr. Sheetz asked for an interpretation of the new definition of fluoroscopic-guided interventional (FGI) procedures in Pa. Code § 221.2. The language could include all FGI procedures, not just those that are high risk, which places a huge burden on the licensee given the necessary requirements for these procedures. DEP noted that the FGI definition will be revised to specifically address high-risk procedures prior to EQB final action. Also, Pa. Code § 221.11(b)(1) addresses high-risk procedures; however, §221.16(b)(1)(i) and (ii) reference "low-dose" and "high-dose." Neither term is defined. Therefore, the references to "low-dose" and "high-dose" will be changed to "low-risk" and "high-risk," which are defined terms.

Ms. Blackwood noted that four radiology Physician Assistants submitted applications for approval through the Department of State (DOS), and DOS has rejected them from performing fluoroscopy. She asked if anyone else has had this issue with DOS. DEP has not encountered this problem yet and noted that DEP regulations in 25 Pennsylvania Code § 215.24 allow Physician Assistants to perform the duties if listed in their job description.

Updates to the Department of Health's (DOH) regulations were discussed. BRP has not heard anything recently, and the regulations are not out for public comment yet. Mr. Salador will reach out to DOH for information after the DEP final regulations are published. RPAC members noted their intention to comment on the DOH regulations during the proposed comment stage.

Information Notices:

Two Information Notices (IN) were issued since the last RPAC meeting. IN 2017-03 discusses combined use of certain devices for monitoring and dosimetry during industrial radiographic operations. Electronic Alarming Dosimeters (EADs) can now be used; however, other devices such as Instadose® are still not permitted. Ms. Berry briefly discussed some technical issues her facility is having with Instadose®. IN 2018-01 was also discussed, which summarizes common violations of the new 10 CFR Part 37 regulations over its first two years of implementation, including guidance documents available to help support the new rules. Mr. Allard spoke about an upcoming meeting with the National Nuclear Security Administration (NNSA) in Pittsburgh to discuss security upgrades for Part 37 licenses.

Open Floor:

The Delaware Valley Society for Radiation Safety (DVSRS) will hold its next meeting on May 18, 2018, at the Holiday Inn in Morgantown. On June 22, 2018, the DVSRS will hold the Rob Forrest 5th annual Memorial Medical Health Physicists Symposium at Jefferson University.

The Penn State Roundtable meeting will be held this fall. There will be an entire day devoted to discussion about Landauer regarding badges, customer service, contracts, cost, etc.

Mr. Lambert asked why a licensee needs a security plan to secure a source they no longer possess. He was told during a DEP inspection that he must keep a security plan to secure a source he doesn't own. John Chippo agreed to ask the NRC for guidance on this.

Mr. McNeely began a discussion on accelerator licensing and the absence of the annual radiation safety program review requirement within the regulations. It was noted that a peer review system could benefit those licensees that have smaller staffing and don't necessarily see the same problems or conditions that larger programs do and therefore may not be as informed on the latest procedures.

The next meeting is scheduled for October 18, 2018, in Room 105, RCSOB.

Adjournment – 2:00 p.m.