

**DRAFT Minutes of the Radiation Protection Advisory Committee (RPAC) Meeting  
14<sup>th</sup> Floor Conference Room  
Rachel Carson State Office Building, Harrisburg, PA  
June 4, 2015**

**Call to order – 9:03 a.m.**

**Members in Attendance:**

John Keklak	Margaret Blackwood
Eric Boeldt	Janice Wirth
Kent Lambert	Anthony Montagnese
Shawn McNeely	Michael Sheetz
Paul Houle	Vincent Roding
Joseph Och	Peter Smith
Victor Rizzo	

**Members Absent:**

Douglas Eggli	William Thorne
Charles Chambers	Tiffany Whitcomb
Charles Stoup	John Pammer
Richard Purse	Eric Miller
Michele Tate	

**DEP Staff in Attendance:**

David Allard	Dwight Shearer
Joseph Melnic	Kristina Hoffman
John Winston	Dyran Altenburg
John Chipppo	Barb Bookser
Keith Salador	Lisa Funk
Bob Lewis	Laura Henry

**Guests in Attendance:**

Steven King	Tim Difelice
Karen Colucci	Eric Gingold

**Introduction of Members and Staff:**

Mr. Allard welcomed everyone, including newest RPAC member Dr. Victor Rizzo.

**Adoption of Agenda:**

Today's agenda was approved unanimously.

**Approval of Minutes:**

Meeting minutes from April 2, 2015, were approved unanimously.

**Open Floor:**

Pennsylvania Chiropractic Association representative, Dr. Victor Rizzo, addressed the committee and commented on fees. His colleagues have concerns regarding radiation-producing machine fees due to lower reimbursement given by insurances and the increase in

cost with taking films. He is requesting DEP to consider a freeze or reduction for their fees. Another suggestion is to class chiropractors in the same category as “dentists, podiatrists and veterinarians,” or establishing a fee between “dentists, podiatrists and veterinarians” and “other clinics.” Mr. Allard confirmed that the Department’s recent fee analysis determined X-ray registrants will not experience increased fees at this time.

### **Radiation Protection Program Update:**

#### Nuclear Safety

A draft environmental impact statement is published for the proposed Bell Bend Nuclear Power Plant in Berwick. There were two public meetings held and a federal/state government meeting. The Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA) issued a proposed NRC / FEMA NUREG-0654 revision 2. It contains new criteria for the preparation and evaluation of radiological emergency response plans in support of nuclear power plants.

#### Decommissioning

Most of the buildings have been demolished at the Safety Light site. There are other sites throughout the Commonwealth in various stages of decommissioning.

#### Radon

Radon – High radon levels in a certain area of eastern Pennsylvania are breaking national records. A poster was presented at the Conference of Radiation Control Program Directors (CRCPD) meeting and at the Interagency Steering Committee on Radiation Standards (ISCORS). It will also be presented at the annual Health Physics Society (HPS) meeting in July.

#### Radiation Control

A Periodic Integrated Materials Performance Evaluation Program (IMPEP) review by the NRC occurred on June 2, 2015. The audit focused on staff turnover (at 30-40% in the next 5 years) and training, as well as other performance indicators. A concern is “knowledge management” retiring. The meeting resulted in all performance indicators being performed satisfactorily. Another Periodic meeting will be held in 2017, and the next IMPEP will be in the spring of 2019.

A new civil service position is being added to the radiation health physicist (RHP) series titled Radiation Health Physicist Trainee. It’s being included in the series to encourage health physicists who recently graduated from college to apply. Unfortunately, during this transition, the entire RHP series has been frozen, and no applications can be accepted by the State Civil Service Commission.

The proposed regulatory revision to Chapter 215, regarding incorporation by reference of Part 37 (Security Rule), was published in the Pa. Bulletin on March 21, 2015. There are 66 Increased Controls licensees subject to the orders codified in Part 37. There were no comments received on the proposed rulemaking, including from NRC or IRRC. The final regulation has RPAC’s endorsement for EQB consideration in September. If approved by EQB and IRRC, the regulation should be finalized during the fourth quarter of this year, with an implementation date of January 1, 2016. BRP is planning to issue an Information Notice to the affected licensees. All applicable licenses will be amended.

The CRCPD annual meeting was held in St. Louis. Fracking from oil and gas operations was a main issue discussed. A “white paper” will be released addressing TENORM concerns for

worker exposure during fracking operations. Other issues discussed were whole body scanners being used in prisons for non-medical surveillance. Suggested State Regulations Part F (SR-F) addressing medical diagnostic and interventional X-ray and imaging systems and radiation safety requirements for analytical X-ray equipment (SR-H) have been published. Radiation safety requirements for industrial radiographic operations (SR-E) are soon to be released.

Low Dose CT – Lung cancer screening was also discussed at the CRCPD meeting. There are still concerns with the high number of false positives. Minnesota is having mobile units showing up in WalMart parking lots offering screenings. BRP is looking to the Pa. Department of Health for advice on this concern.

An update to the Radiation Protection Compliance & Enforcement Guidance Document is currently being reviewed by Policy and will be presented to the RPAC followed by publication in the Pa. Bulletin for public comment.

A review of reportable events that have occurred since December 2013 was presented.

In 2014 there were 18 material-based reportable events:

- 4 lost, stolen or missing material: 1) Palladium-103 seeds inadvertently disposed of in the trash; 2) Iodine-125 seeds inadvertently disposed of in trash; 3) Troxler gauge stolen; 4) inspection revealed an unaccounted gauge eventually found in California.
- 2 medical events involving Y-90: 1) underdose (76%) due to precipitation of the solution; 2) possible migration of microspheres to another organ (stomach).
- 4 stuck shutters, all fixed gauges having specific licenses.
- 3 radiography events, all failing to retract the source: 1) guide tube wasn't properly connected to the camera. 2) guide tube became kinked due to something falling on it. 3) camera fell off a pipe and the guide tube got kinked.
- 2 contamination events: 1) Ra-226 GC detector cells failed leak test. 2) a waste package was received with a tear in the metal outer container resulting in reportable contamination.
- 2 non-reportable events: 1) lost Cs-137 check source < 100µCi; 2) Brachy seeds (230 I-125) delivered to the wrong address.
- 1 retracted brachytherapy event – Original D90 dose believed to be 43%. Reassessment resulted in >80% dose received.

In 2015 there have been 10 reportable events to date:

- 1 lost, stolen or missing material: 1) Troxler gauge stolen – same licensee as the 2014 event (9 mCi Cs-137 and 44 mCi Am-241).
  - 1 equipment failure – fixed gauge broke off of its bracket.
  - 1 surface contamination event – package containing F-18 exceeded contamination levels.
  - 1 RAM package was stored in an unrestricted area.
  - 1 Y-90 underdose – infusion apparatus failed.
  - 3 radiography events, all failing to retract the source: 1) guide tube became disconnected 2) guide tube became kinked due to something falling on it. 3) cable broke and became dislodged.
  - 1 source (Am-241) found in scrap metal yard.
  - 1 radiographer's badge overexposed – it was dropped within the shooting cell and retrieved later, but never reported to management. Badge was then analyzed with a high reading and the radiographer confessed.
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In 2014 and 2015 the Department had 8 accelerator events reported:

- 4 incorrect doses – only 1 of the 2 treatment plans were administered in one case. In the other cases the wrong patient plan was administered.
- 2 incorrect sites
- 2 wrong patient exposures

Mr. Difelice, a member of the public, asked if a cadaver used for medical training that had radioactive seeds in it would be reportable. Response: Such a situation would fall under the patient release criteria. This topic will be discussed during the upcoming Organization of Agreement States annual conference.

An Information Notice was issued to Category 1 and 2 radioactive material licensees encouraging voluntary security enhancements for their sources. The National Nuclear Security Agency (NNSA) is offering new incentives for licensees to make Category 1 and 2 sources better secured by paying for the initial installation of these enhancements.

At the request of RPAC members, paid licensing fee notices are now being sent by letter to licensees. An email notification, rather than a hardcopy letter was suggested; however, the Department does not readily update email addresses.

## **Regulatory Revisions**

### Radiological Health Revisions

Chapter 240:

Dr. Houle provided the committee with a document explaining the major changes to the radon regulations in Chapter 240. RPAC agreed and approved the revisions unanimously for moving forward on this chapter. A request was made to further define “schools” in the regulations. It was expressed that the definition EPA uses will be included, that is, primary and secondary public schools.

Chapter 221:

- Section 221.2 – Delete “design” from the definition for performance phantom.
- Section 221.11 – Recommend an addition to registrant responsibilities to require that shielding evaluations meet 10 CFR Part 20 requirements.
- Section 221.35a(c) - Evaluations shall be made “by or under the direction of the QMP.” Replace “measurements” with “evaluations.”
- Section 221.35a(b)(3) – Delete “Fluoroscopy exam” and simply use “exam.”
- Section 221.61 – Correct the referenced subsections.
- Section 204 – Change “spot checks” to “routine QC” in subsequent subsections.
- Section 204(a)(3) – Separate into two sentences for clarity.

- Section 221.204(a)(4)(ix) – Change “existing” to “commonly used” and reword evaluation “for appropriateness of dose and image quality.”

Mr. Sheetz led a short discussion on the definition for Qualified Medical Physicist. He solicited a number of physicists in western PA and posed a number of questions. The results and comments will further aid in developing an appropriate definition.

**Other Business:**

Laura Henry, Executive Policy Specialist, addressed the committee on a new transparency initiative launched on May 30, 2015. A new online feature, “eComment,” will expand transparency and further enhance public participation in the policymaking process. The eComment system allows the public to more easily access Technical Guidance Documents and other policy-related proposals open for comment. The public can also view all support documentation, submit comments online and view the full text of all public comments submitted. All comments will be available within 5 days of submission and will remain viewable until the documents are finalized. The eComment system rollout is occurring at the same time as the release of the revised “Policy for Development and Publication of Technical Guidance.” As recommended by members of DEP’s Citizens’ Advisory Council, DEP, under this new policy, will publish a non-regulatory agenda twice each year that lists all of the policies and technical guidance documents the agency plans to introduce or revise. DEP currently publishes a similar agenda of anticipated regulatory changes twice a year in the Pennsylvania Bulletin as required by Executive Order 1996-1. In addition, the policy expands the role of advisory committees by requiring DEP staff to consult with members of the corresponding advisory committee(s) when developing technical guidance documents and to do so as early in the process as practicable.

An additional RPAC meeting is scheduled for July 23, 2015, at which time action on the draft radiological health proposed rulemaking will be requested.

**Adjournment – 3:03 p.m.**