Minutes of the Radiation Protection Advisory Committee (RPAC) Meeting Combination Virtual / In Person Meeting

April 27, 2023

Meeting called to order at 9:01 a.m.

Members in Attendance:

Marian Wolford Janice Anne Todd Mobley John Keklak Joseph Och Aaron Fisher

Nathaniel Burden Anthony Montagnese Steven King Margaret Blackwood

Members Absent:

Summer Kaplan Chrysan Cronin
Peter Smith Victor Rizzo

Shawn McNeeley

DEP Staff in Attendance:

Dwight Shearer John Chippo David Gaisior Derek Stahl

Lisa Funk Christopher Heckert

Dennis Ferguson Frank Peffer Stephanie Banning Denise Bleiler Josh Myers Barbara Bookser Bethany Piper Dyran Altenburg Maria Coons Bryan Werner Jennifer Minnick Ben Seiber Valerie Shaffer Laura Griffin Dale Davis **Nicholas Pistory**

Guests in Attendance:

Kendall Berry
Karen Colucci
Brenda Colwell
David Hess
Jason Collier
Kurt Blodgett
Alex Khammang
Sunil Valaparla
Ashley Langan
Adam Henry
Patrick Hann

Introduction; Adoption of Agenda; Approval of Minutes:

Minutes: The agenda for this meeting was adopted and the minutes with minimal corrections from the December 9, 2022 meeting were approved.

Open Floor:

No members of the public registered to provide public comment. An RPAC member asked if an annual survey would be required when a cabinet X-ray machine is present at a facility but no longer being used, DEP staff stated the facility should show that the unit is not being used by following a tag out/lock out procedure and/or be able to provide proof the unit is no longer operable or being used. Otherwise, it would be considered a tube that is in use and an annual survey would be required. Should the machine become operable again in the future, a survey would need to be completed prior it being put back into use.

Program Updates:

Nikki Minnick and Barb Bookser were congratulated on their new positions as program managers in their respective regional offices. The program manager position at the Southcentral Regional Office will be posted soon. The Governor's Office has created new departmental initiatives that involve permit efficiency. DEP has issues as a whole with approving permits and not creating a backlog; however, the program does not have a backlog of permits. Another initiative they created is for DEP to become paperless by digitizing records and uploading them into the DEP's OnBase file repository system.

The Bureau of Radiation Protection (BRP) is increasing their radiological fees for non-healing arts for radiation-producing machines. The last fee increase for the X-ray program was in 2009 and BRP's radioactive materials program's last fee increase was in 2017. The nuclear power plants last fee increase was in 2014. These fee increases can total up to 30-40% in some areas.

<u>Decommissioning/Environmental Surveillance:</u> Daily, monthly and quarterly calls are taking place relating to upcoming projects taking place at Three Mile Island (TMI) Unit 2. The Bureau's goal over the next five to seven years is to evaluate the impact of this area related to the accident. Reducing those high-radiation areas will help to detect and prepare for major demolition of this area. TMI Unit 1 is in SAFESTOR and dry cask storage.

<u>Nuclear Safety</u>: Nuclear Safety's new division chief is David Baracco. David comes to BRP from Exelon (Peach Bottom) and he brings with him a lot of emergency response experience. He is rolling out the new ePlan, which hasn't been edited in nine years. New binders were printed and will be distributed with this plan. He's also been charged with updating the Bureau's technology and transitioning us into using newer equipment.

<u>Radiation Control</u>: BRP's radiological fees final regulation will be presented to the Independent Regulatory Review Commission (IRRC) on May 18. Approval would enable the Department to have it published in the *Pennsylvania Bulletin* and go into effect. If approved, invoices with the new fees could possibly be generated for the October billing cycle.

BRP is going to provide in-house training for their inspectors to coincide with the roll out of the new nonmedical radiation-generating device regulations once approved for publication in the *Pennsylvania Bulletin*. The Bureau is telling the inspectors to allow a one-cycle grace period for compliance assistance.

BRP may have to assign two inspectors for future inspections at more complex facilities that normally require a lengthy review of the facilities due to personnel requirements. When the inspectors call to set up inspections, the Department is asking facilities to try to give the inspectors as much information as possible prior to their visit so they can prepare their time efficiently before coming to a facility and limit their time onsite by already having these records available to them.

Some of the less complicated radioactive materials (RAM) licenses coming up for renewal will be extended by one year past that renewal date. BRP records indicate that one-third of all the RAM licenses will be up for renewal in 2024 and that would be a huge burden on staff to review all of those licenses. The Bureau plans to spread some of these renewals out over the next several years to help us remain efficient in the renewal process. These changes will not change inspection frequency or the license fee. The only thing changing is the year being moved and will only happen once. An administrative amendment, along with a letter, will be sent out to all the licensees affected later in the year. The administrative amendment will show the new renewal year.

An RPAC member wanted to show his appreciation to BRP's radiation control staff for their quick responses to emails, questions, and amendment requests. Another RPAC member seconded the appreciation and showed appreciation for the inspectors in the Southwest Regional Office (SWRO). This RPAC member stated that, prior to an inspection, the SWRO inspectors are sending a list of requested documents for review and having the documents uploaded ahead of time. This is giving the inspectors a chance to review these documents prior to arrival and saves the facilities a lot of time since the documents are already reviewed. They also stated they liked this new process and would recommend the other regions adopt this method due to its efficiency.

An RPAC member commented on the process of RAM license renewals. This RPAC member is requesting a confirmation email be sent to the licensees once the fee is received. This member shared with the committee an incident where they were double billed because a fee was not received the year prior even though the check was mailed. BRP stated they could generate a letter when a payment is added into the Department's eFACTS system letting the licensee know a payment was received. There is an ongoing issue with mailing addresses that are in the eFACTS system and an email of the letter may be more efficient and direct compared to sending the letter to the mailing address that is in the system.

An RPAC member asked if BRP could provide resources that could be used for Radiation Safety Officers that need their eight-hour training to use full-body scanners. BRP staff stated they have resources that can be shared and that several facilities have used them to conduct the training.

An RPAC member asked if there was any kind of refresher training available for the PA Radiological Response Program and asked if the program is still available. BRP told the committee the program is being resurrected. The Bureau is currently in the process of locating the equipment and that this program will be included with another future nationwide program. Another RPAC member provided a summary of a tabletop radiological emergency drill they

participated in. There were representatives at this exercise from across the state. This member expressed concerns of the lack of coordination between state and federal agencies and safety teams who would respond if there was a radiological event.

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

There were six NMED events since the last RPAC meeting. One was a found source, one was a lost/missing source, one was an unplanned contamination event, one was a medical event, and two were leaking sources.

There were nine MRE events since the last RPAC meeting. One involved a patient receiving a weekly fractionated dose that was greater than 30% of the prescribed dose; one involved a patient receiving treatment to the pelvis with a fractional dose that differed by 50% of the intended dose; one involved a unit breaking down during a treatment; one involved a patient receiving an unplanned overlap between the brain and spine fields during a craniospinal irradiation; one involved a patient that received a higher-than-planned dose due to insufficient verbal confirmation prior to turning on the beam; one involved a patient receiving the intended treatment being delivered to the incorrect patient; and finally three involved patients that received treatment at the wrong location due to treatment misalignment.

Cone-Beam Computed Tomography (CBCT) Qualified Medical Physicist (QMP) Performance Evaluation and Offset Scanning Regulation Discussion

The regions and inspectors have noticed growing QMP issues. State regulations specify that when there is a CBCT attached to a dental office, a QMP or qualified expert (QE) must perform the annual survey. These facilities are having a difficult time finding QMPs or QEs willing to drive to the northern tier to perform these surveys. Each of the regions have developed a list; however, there can be a three-to-six-month backlog to perform these evaluations which makes it difficult for these facilities to stay in compliance with the regulations. BRP would like an opinion from RPAC to help develop a plan of correction which would allow manufacturers/installers to perform the annual surveys for dental facilities who do not have close proximity to health physics groups.

A blanket exemption was suggested to be used until the regulations open again for change that would exclude part of the regulation. An RPAC member stated the dental community does have concerns relating to inspections. The Bureau has also had dentists ask who would be liable for the repair if the tube cracked during the inspection. Another issue within the dental community is the hard selling by the manufacturers for the CBCT. Manufacturers are giving misleading/inaccurate information to the dental community and they are not aware of this. Some dentists also thought that the manufacturers could come into their offices to perform the annual survey. DEP regulations do not point to a specific dose but to a national standard, and that national standard typically has a wide range. BRP has created a CBCT fact sheet that is located on the website. Registration forms were modified to include the CBCT tube type along with whole body scanners tube type. It may take an effort to backtrack and see how many CBCTs are currently registered and then to review previous inspection reports to determine the manufacturer and the dose. The Bureau's inspectors do a great job providing education. Bureau staff

suggested that while the inspector is in your facility completing an inspection, facilities should also schedule their next inspection since it is an annual requirement. It was suggested that DEP seek further input on this. The regional offices will continue to offer compliance assistance. After an inspection is completed, Bureau staff collect exposure data for trending purposes. The Bureau could also begin to collect data by tube type and include the zip codes. Another RPAC member suggested since there are hospital facilities throughout the state and their equipment would need to be inspected to try and reach out to those individuals to get on DEPs list of QMPs.

Limited License X-ray Techs in PA

BRP staff were contacted by a company who is building urgent care centers throughout Pennsylvania. In 2018, the PA Department of State eliminated the pathway that helped the limited technologists take a test through the American Registry of Radiologic Technologists (AART) to receive a limited license even though the regulation did not change. The company complained because a limited technologist who lives in Pennsylvania that wants to take this limited exam can no longer do it. The company building these urgent care centers asked us why. The Bureau informed them that the PA Department of State that eliminated the pathway mainly because there were not many technologists that chose to take the limited exam. The doctors that were hired to run these urgent care centers are telling the Commonwealth that they cannot find technologists in Pennsylvania. When the company contacted other states, they realized it was not always an issue in the other states. The Bureau contacted the American College of Radiology (ACR) and found out there is a list of 23 states that have a contract with the ACR that could provide the limited exam, which is the same exam in all of these states. These states have requirements that these technologists must meet, and they had to submit proof of their education and their hands-on experience. Once that is reviewed, the state then contacts the AART who would then contact the individual and set up a time for the limited exam. Once the person passes the exam, they receive a letter from their state agency that had the pathway to take the exam that shows they passed and are approved to do limited exams. Some of them mention the AART and some of them do not. In all the data gathered from these individual states they all had very similar requirements in order for these people to qualify to take the limited exam. The Bureau would accept someone who took the exam through one of the states that contracted with the AART.

Status Update Only on Non-Medical X-ray Rule for Chapters 225, 227a, and 228 and Chapter 218 Fees

The Radiological Fees and the Radiation Safety Requirements for No-Healing Arts for Radiation Generating Devices final regulations are on the agenda at the Independent Regulatory Review Commission meeting to be held on May 18, 2023. If approved, they'll go through a 30-day review process with the Office of Attorney General and once it is completed it will then be forwarded to the Legislative Reference Bureau for publication as final in the *Pennsylvania Bulletin*. Invoices would begin with new fees in September.

Open Floor

An RPAC member stated that they are participating in a diagnostic medical physics residency program that is run through the Allegheny Health Network since July 2022 and part of the residents' education requirement is radiation safety. They invited some of the first-year residents and other members of the general public to learn and observe from this meeting as a regulatory committee for DEP in Pennsylvania.

An RPAC member mentioned that two items recently were announced relating to the NRC that should garner the Committee's attention. One item is their definition of a medical event. The NRC would like to add extravasation from nuclear medical procedures. This definition is currently under their comment period. It is important that members review this and let their authorized users know that they are in agreement with this change and that it could impact DEP as a NMED event.

Additionally, the NRC is updating their regulation guide 8.39. This guide appears to be more conservative than the current regulation so if this would be approved it is possible that policies and procedures may need to be updated.

Another RPAC member stated they are having a PR event on May 1st at the Capitol Rotunda. This event is being held to introduce a bill that would require radon testing in PA schools. News coverage starts at 12:30. This bill is being co-sponsored by Representative Briggs, Representative Ortitay, and Senator Johnson.

A member of the public asked if there was a change in licensing strategy to obtain a broadscope license. They were told to include what line items are used for each location on their license. What is the regulatory pathway and reasoning for this change? BRP is trying to identify the actual buildings of use on these licenses. The Department is doing this with every licensee, not just those who use broadscopes. There have been delivery issues in the past and the Bureau gets telephone calls from the border control agents because the material can't be delivered to the mailing address provided. To avoid this confusion, BRP has been narrowing down locations on each licensee to not only help the inspectors but, in the case of decommissioning a broadscope without alerting the Department in advance then BRP knows to remove this building where the material was located.

An RPAC member asked what the length of time is for parking lot items? Are they reviewed periodically? It was stated that when regulations are about to be opened, BRP revisits the items on the list. The committee has asked if they could review the items on the list.

The meeting adjourned at 11:30 a.m.

The next RPAC meeting will be held October 19, 2023. The meeting format will be determined but most likely will again be a combination of virtual and in person.