

DRAFT Minutes of the Radiation Protection Advisory Committee (RPAC) Meeting
Virtual Meeting Via WebEx
June 10, 2021

Meeting called to order at 9:04 a.m.

Members in Attendance:

Michael Sheetz
Todd Mobley
Shawn McNeeley
Victor Rizzo
Anthony Montagnese
Summer Kaplan

Marian Wolford
John Keklak
Joseph Och
Nathaniel Burden
Steven King
Janice Wirth

Members Absent:

Margaret Blackwood
Peter Smith
Chrysan Cronin

Keith Salador
Aaron Fisher

DEP Staff in Attendance:

David Allard
John Chipppo
Lisa Funk
Roy Huhn
Kristina Hoffman
Josh Myers
Terry Derstine
David Gaisor
Denise Bleiler
Kate Cole

Dwight Shearer
Nikki Minnick
Chris Minott
Bryan Werner
Stephanie Banning
Robert Zaccano
Dennis Ferguson
Lisa Forney
Robert Lewis

Guests in Attendance:

Kendall Berry

Introduction; Adoption of Agenda; Approval of Minutes:

The agenda for this meeting was adopted, and the minutes from the October 29, 2020, were approved.

Public Comment/Open Floor:

No members of the public registered to provide public comment.

It was noted that House Bill 1811 has been reintroduced as House Bill 1440 to amend the Medical Practice Act of 1985, providing for medical imaging professionals, radiation therapists,

radiologist assistants and related fields. This change also includes removing chiropractors from the bill.

An RPAC member asked when DEP staff are returning to the office. Mr. Allard stated that preparations are under way to begin transitioning back into the office in mid-July. This will be a phased-in return. State government had been working on a telework plan before the pandemic hit. There may be an allowance to continue to telework to some degree. Regional staff have laptops and will return at an earlier date. Through the pandemic, administrative staff have been keeping up with the workload processing checks and distributing the mail.

Program Updates:

Radiation Control: Permitting is continuing as usual with minimal delays. BRP staff have approval to come into the office to retrieve files and for processing mail and checks. However, mail delays continue. BRP is working to alleviate these issues. Most regional inspections had been put on hold, but over the past few months, are slowly re-starting. They are being prioritized by high risk and the U.S. Food and Drug Administration Mammography Quality Standards Act (MQSA) contract requirements.

Decommissioning/Environmental Surveillance: Division staff has had large turnover. As a result of the retirement of Section Chief Tonda Lewis, another staff member (Cory Fahnestock) moved into the Environmental Surveillance Section Chief position, which is housed in the Bureau of Labs. Most decommissioning and environmental surveillance work has slowed down due to the pandemic. There were small cleanups and license terminations, and the Division continues to perform environmental surveillance sampling at the nuclear power plants. Vacant positions are being filled as quickly as allowed.

Radon: The Radon Division is now fully staffed. During Radon Action Month, outreach included a number of Public Service Announcements and social media advertisements. The Division just finished up a high-radon area mitigation project located to the south of Allentown.

Nuclear Safety: Rich Janati, the former Division Chief, retired last July, but he has returned as an annuitant. Steve Acker has returned to DEP after 10 years and is now the Division Chief. Steve will be BRP's lead for the Low-Level Waste (LLW) Forum and will be the liaison for the LLW Advisory Committee. The Department continues to serve as the host state for the Appalachian States Low-Level Radioactive Waste Commission that started in the late 1980s with Delaware, Maryland, and West Virginia. Mr. Allard is currently the Chair of the Commission, and they had their annual meeting in November 2020. All the information on this Commission is available on BRP's website should anyone have interest.

Regulations Update:

BRP made a presentation at the May 19, 2021, Environmental Quality Board (EQB) meeting regarding the Radiation Safety Requirements for Non-Heating Arts Radiation Generating Devices proposed regulation package, and the rulemaking was unanimously adopted by the EQB as proposed. This regulation will be published in the *Pennsylvania Bulletin* for a 30-day formal

comment period. Once comments are received, BRP will prepare a draft final rulemaking package to bring back for discussion with RPAC.

BRP's annual budget is \$14 million for approximately 100 staff, rents, equipment and services. BRP is currently reviewing projections with program salary increases for personnel and other expenses to see how quick carryover is eroding. BRP also has a requirement in the regulations and in the Radiation Protection Act to review fees for the machine, materials and radon programs, as well as Nuclear Power Plant fees, every three years. BRP intends to do this analysis in the upcoming year.

Discussion Items

At the last RPAC meeting, changes to the RPAC bylaws were proposed. Changes were reviewed and highlighted in red, with old language removed because it is no longer necessary. The other change removed the requirement that meetings must be attended in person. The change allows the ability to vote whether you are joining the meeting in person or virtually. A vote is required to approve the changes of the bylaws in order to adopt them. John Keklak motioned to approve, and Nate Burden seconded it.

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 fatal transportation accident, which damaged licensed material; one was the inability to retract the radiography source; three were lost, abandoned, or stolen sources; and one was a medical event.

There were four therapeutic medical reportable events. The first involved a patient being treated with another patient's plan; another was a treatment that was misaligned causing a dose deviation for one treatment due to incorrect isocenter being entered into the electronic record. Another one was a patient receiving treatment for a single fraction more superiorly than intended, and the final event involved treatment becoming affected due to the electronic health record not scheduling according to the treatment plan and also not flagging the scheduler of issues when an appointment is not available.

Posting of X-ray Exam Fetal and Gonadal Shielding FAQs

The American Association of Physicists in Medicine (AAPM) issued a public statement in the last year regarding fetal and gonadal shielding during X-ray exams. This was reviewed by the National Council on Radiation Protection & Measurements (NCRP). A commentary statement was also issued on gonadal shielding this past January. The Conference of Radiation Control Program Directors (CRCPD) has also voted on a position statement related to this topic. The CRCPD's Board of Directors will issue a final statement on this. The Commonwealth's regulations and policy do not require absolute use of gonadal shielding during an X-ray exam, and in fact, allow for no use if it will interfere with the exam and image. BRP plans to reach out to educators and the local American Society of Radiologic Technologists (ASRT) Chapter to see how they plan to address this. A roll-up of this information will be presented as an FAQ to be published on DEP's website.

An RPAC member requested if the committee could review the FAQs prior to posting onto BRP's website and be able to provide feedback. Mr. Allard said yes. The intent is to have the FAQ's address the issue and highlight PA's related regulations that already address this matter.

Regional Inspections

SWRO: The SWRO has been performing inspections throughout the pandemic. Internal procedures have been created for various programs to request approval from the Regional Director to complete inspections. SWRO was able to return to conducting MQSA inspections as of last July. Smaller facility inspections have also now resumed. COVID case counts by county are reviewed, and high total count areas are avoided.

SCRO: SCRO has only been doing emergency inspections. SCRO has mainly been checking in via phone and performing virtual inspections. However, SCRO staff are back in the field now with a greater presence visiting one facility per day. Inspectors are reaching out to facilities that use the same radiologist to check the readings for the MQSA inspections.

SERO: SERO has a similar inspection scenario as SCRO and have kept up with tele-inspections. Terry Derstine stated MQSA inspections were not able to be done via tele-inspection. These inspections were only able to be conducted in person, so those were not performed.

An RPAC member commented that their facility likes tele-inspections. This member wanted to know if they could continue to perform tele-inspections after the pandemic is over. Mr. Allard said the Program continues to review and discuss inspections with the Regions. There is clearly a need to be onsite at times, but this request will be reviewed.

TENORM and Hydraulic Fracturing Discussion

PA is now the 2nd largest producer of natural gas in the nation as a result of hydraulic fracturing. It was noted that 30% of the frac water is returned, and it is laden with salts. Besides salts, there are metals including barium and radium in the returns. Some solid waste with radium is disposed of at landfills, while high activity TENORM waste is sent to Utah. BRP is drafting the annual low-level radioactive waste (LLRW) report on this now. BRP reports on these LLRW and TENORM volumes on an annual basis, with reports published on DEP's web site.

Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities Update

Twenty years ago, DEP developed regulations related to radioactive waste at solid waste processing and disposal facilities and this associated guidance document which requires all facilities to install radiation detectors. This guidance also addresses requirements for calibration and training of workers, as well as developed a useful protocol, so that if an orphan radioactive source or patient-contaminated waste would show up, it could be isolated for proper LLRW disposal, shipped out of a transfer facility and moved for disposal at a landfill or even incinerated.

Recent changes to our Oil and Gas regulations now require any operation at a well site that is going to be processing produced water onsite or otherwise generate TENORM to develop and submit a Radiation Monitoring Action Plan for approval by DEP. The oil and gas regulations now point to this technical guidance document. BRP has worked with the Department's Bureau of Waste Management and Office of Oil and Gas Management to update this guidance accordingly. After publishing a draft version of the TGD for public comment, the Department is reviewing the comments received, preparing a comment/response document and editing the final version of the TGD as appropriate. It will be presented to the Solid Waste Advisory Committee on June 16, 2021, and to the Oil and Gas Technical Advisory Board in September.

An RPAC member raised a question regarding Appendix C of NRC Reg Guide 8.39 and asked to whom this guidance document is being targeted. The table used in the guidance is for patients with greater than these doses to be released based upon dosimetry calculations the physicist might perform. Mr. Allard stated the target audience are the solid waste facilities and illustrated the types of short-lived radioactive material that could be detected at a solid waste facility. Mr. Allard stated a footnote could be included to this table to address the points raised.

An RPAC member suggested the Department use the new NRC definition for byproduct material. Mr. Allard stated the definition will be reviewed. However, they may not have to match because the solid waste regulations were codified circa 2000. Also discussed was the radioactive material from consumer products that can be discarded from homes. In the area of licensed material, it states such items will want to be collected for proper disposal. Mr. Allard stated the Department does work closely with the landfills, transfer facilities, and metal recyclers and does at least one orphan source roundup and pick up of these discreet radioactive sources yearly.

An RPAC member asked what the big changes are in the two documents. Mr. Allard stated federal transportation 'exemptions' are now considered 'special permits.' There are two types of permits that can be issued if alarms go off at a solid waste or metal recycler facility. When such material is detected, the shipper can be exempted from federal DOT regulation for shipping back to the originating facility. The area of oil & gas operations was also updated.

Open Floor

An RPAC member asked if any guidance is available on disposing used X-ray tubes when their vendor won't tell them what is in the tube. Another RPAC member suggested discussing the used X-ray tube with their local DEP facility.

An RPAC member wanted to comment on the DOT exemption forms. His team has had very good success working with BRP and getting signatures and forwarding the form for approval.

There may be another DEP sponsored mercury collection program in the next year or two. It may take place in the Fall of 2021 or Spring of 2022. This collection program will be investigated, and information will be shared with the Committee members. Ms. Valerie Shaffer, Executive Assistant, will be the DEP contact for this.

An RPAC member asked if the person that sets up a fluoroscopic machine, assists the physician during the fluoroscopy by changing some of the sizes of the beams, moving the direction of the image and intensifier as the physician indicates, must be registered as an X-ray technician. In their opinion, this person is just assisting the physician, is a user of the equipment, and this user does not have specific training other than having some general training with the equipment. The commenter believes the physician is in charge, not the other person. This machine may be a fluoro machine specifically used for pain.

An RPAC member asked if nurse practitioners can operate fluoroscopy. It is not specified in DEP's regulations. DEP staff noted under the regulations and the Radiation Protection Act, the Department is the clear regulator of the equipment and has codified who is qualified. The member requested a statement from the Radiation Control Division and attorney. BRP will discuss how to come up with a clear definition. A related FAQ is already in the works.

RPAC member Kent Lambert has retired, and another member has recommended Kendall Berry become a Member at Large. Mr. Chipppo stated he will send an email to Ms. Berry listing the required documents.

An RPAC member mentioned he attended a few nonprofit meetings regarding public radioactive fracking brine waste. Mr. Allard stated that there is an extensive TENORM study and solid waste guidance documents available on our website. The Bureau of Waste Management limits amounts of TENORM waste received at a landfill by month. The Bureau of Waste Management will also start sampling landfall leachate and testing for radium in the near future. This RPAC member suggested a webinar be created on this issue.

Based on his work in western PA, Nate Burden received the CRCPD's Radon Hero Award for this year.

An RPAC member suggested an in-person meeting for October. A hybrid-style meeting was also suggested for those who need to travel.

The meeting adjourned at 12:00 p.m.

The next RPAC meeting will be held October 28, 2021.