

RADIATION ADVISORY COUNCIL
April 11, 2014
Minutes

ATTENDEES:

Robert Friedman, CHP
Susan Hiatt, Vice-Chair
Heather Kight-Isaly
David Kimberly, DDS, MD
John Olsen, MD
Robert Peterson, Jr.
Bill Thomas, CHP, CIH, Chair

ABSENT MEMBERS:

Timothy Angel, Ph.D., RS, CPM
Kerry Krugh, Ph.D
Larry Osher, DPM

ODH STAFF ATTENDEES:

James Castle
Jean Hardy
Mark Light

GUESTS:

Rick Sites

The Radiation Advisory Council (RAC) was called to order by Chair, Bill Thomas at 10:45 a.m., Friday, April 11, 2014, in the Ohio Department of Health, Basement Training Room A, located at 35 E. Chestnut St., Columbus, Ohio. There was a quorum present at this meeting.

Agenda Review –The RAC reviewed the Agenda. Bill Thomas asked that the committee reports be moved to the top of the agenda due to a delay in Mr. Peterson arriving. Bill Thomas then made a motion to approve the agenda as changed. John Olsen seconded the motion. The motion was passed.

Minutes of January 17, 2014 Meeting – The minutes of the January 17th meeting were reviewed. Bill Thomas had some additions to add to the minutes which will be reflected in the final January 2014 minutes. Bob Peterson made a motion to approve the minutes and Robert Friedman seconded the motion. There was no opposition heard and the motion passed.

Committee Reports

Radioactive Materials Committee – Susan Hiatt

Since the January RAC meeting, the Radioactive Materials Committee has met three times: February 11, March 11, and April 8.

At the February 11 meeting, the committee reviewed NRC comments on rule changes responsive to RATS 2012-3, and reviewed several rules in Chapter 3701:1-38, as part of the five-year rule review process.

At the March 11 meeting, the committee reviewed rules being changed in response to RATS 2012-4, which concerned manufacturing and distribution requirements and generally licensed devices.

At the April 8 meeting, the committee conducted a five-year review of most of the Chapter 3701:1-40 rules. The committee also approved, for the RAC's consideration today, rules 3701:1-43-01 and 43-07. These rules are being revised in response to legislative changes.

The next meeting will be held on May 13.

Radiation-Generating Equipment Committee – Larry Osher – No report on this committee.

Department Reports

Bureau of Radiation Protection, and X-Ray Program, James Castle

BRP personnel changes: Megan Barrow has been hired as a Health Physicist in the X-Ray section out of the Akron office. The BRP is now fully staffed for the first time since August 2007.

The outage at the Davis-Besse Nuclear Power Plant to replace the steam generators and two reactor coolant pump motors is ongoing.

- Hydro-demolition was used to cut the concrete of the shield building in the same area where the shield was cut to replace the reactor vessel head in 2011.
- Apparently when the shield cut was restored in 2011 an insufficient amount of concrete was used or the concrete settled and left a void on the inside surface of the concrete shield wall.
- The void is approximately 6 to 8 inches in height and 22 feet long.

- Plant personnel analyzed whether the shield building could perform its intended function with the void present, and their calculations determined that the void would not have affected the shield building's ability to function.
 - The NRC's review of the situation is still on-going. Concrete was poured last week to restore the shield building.

A dry run for the upcoming Hostile Action Exercise at the Beaver Valley Nuclear Power Plant was held on April 1. The FEMA graded exercise will be conducted on June 17.

Human research using x-rays. Plan to address at the April 18, 2014 REC meeting.

Security screening devices. Plan to address at the April 18, 2014 REC meeting.

Dermatologist using superficial therapy equipment to treat skin cancer. Plan to address at the April 18, 2014 REC meeting.

Public Guidance for rule 3701:1-66-04 is now available on the x-ray website.

4 Misadministration occurred. 2 reported to Department and 2 not reported to the Department. Description of 1 report:

- Phone report 4/2/2014. Patient (A) to receive treatment plan to the pancreas received another patient's (patient B) rectal treatment plan for one field of treatment.
- The reason this occurred was because the therapist failed to properly identify the patient. Patient (B) rectal treatment was scheduled for 10:00am but showed up late. Patient (A) pancreas treatment scheduled for 10:30am showed up early. The machine was set-up for Patient (B) and Patient (A) was brought into the room and treated with patient (B) treatment.
- Based on several of the geometry factors (size and shape) of the patient and the geometrical factors of the set-up being so similar the dose was actually delivered to the appropriate area. The plan field dose was supposed to be 49cGy but the dose delivered was 42cGy.
- The radiation therapist discovered this after delivering the first field. The radiation therapist tried to contact the managing physician on 3/31/2014 but did not reach him/her until 4/1/2014. The event was not reported to other appropriate individuals (Direct of Radiation Oncology, Medical Director and Medical Physicist) until 10:17am on 4/2/2014.

Inspection Numbers

The Bureau of Radiation Protection inspected 1,875 x-ray units at 865 facilities. There were 19 On-site hospital inspections, 55 CRE annual audit reviews, 93 MQSA inspections, and 24 freestanding healthcare facility inspections.

Nuclear Materials Safety, Mark Light

During the 1ST quarter of 2014, 102 radioactive materials licensing actions were completed. This included 4 new, 19 renewals, 75 amendments, and 4 terminations. There are no overdue licenses.

<u>2014</u>		<u>YTD 2014</u>
102	Total	102
4	New	4
19	Renewal	19
4	Term.	4
75	Amend.	75
0	Abandon	0

During the 1ST quarter of 2014, 41 radioactive materials licensee inspections were performed and there were no significant violations. There are no overdue inspections.

YTD 41 inspections performed

During the 1st quarter of 2014, 6 incidents were recorded, 1 resulted in a medical event. This was discussed with the committee.

During a liver radioembolization procedure with Y-90 SIRTEX Sir-Speres on 1-24-14 an unanticipated shunting occurred and was identified during the procedure. The procedure for the right liver lobe was stopped when the shunting was identified. The after imaging the patient, the licensee determined the unintended dose to the gastric fundus was 11 Gy on 1-27-14.

Radon Testers: 302 (13 initial licenses approved to date in cy2014)

Radon Mitigation Specialists: 108 (6 initial licenses approved to date in cy2014)

Radon Contractors: 78 (4 initial licenses approved in cy 2014)

Radon tests performed in 2013 Q3 & Q4 = 14,797 (this is a 41% increase over same time period in 2012)

Radon Mitigation systems installed in 2013 Q3 & Q4 = 4,639 (this is a 34% increase over same time period in 2012)

Mitigation System Inspections performed by Staff in 2014 Q1 = 8

Rules: To be reviewed: 3701:1-43-01 AND 3701:1-43-07

Technical Support, Stephen Helmer – No Report

Old Business:

Review 2013 Annual Report – The 2013 annual report was reviewed. David Kimberly made a motion to approve the report, John Olsen seconded the motion. The motion was approved.

New Business:

Review Rules: 3701:1-43-01 – Definitions
3701:1-43-07 - Exemptions

Both rules were reviewed. Bob Peterson made a motion to approve both rules as written and David Kimberly seconded the motion. The motion was approved.

Next meeting of the RAC: July 18, 2014

Adjourn: The meeting adjourned at 12:00pm