

MARYLAND RADIATION CONTROL ADVISORY BOARD
MINUTES
April 28, 2022

Maryland Department of the Environment (MDE)
Air and Radiation Administration
Radiological Health Program

MEMBERS PRESENT

Sean Austin, CHP (Chair)
David Bisson, CHP
Jeanette Linder, M.D.
Mahadevappa Mahesh, Ph.D.
Josephine M. Piccone, Ph.D.
Stewart Becker, Ph.D.
Malek Daneshvar, CHP
Mr. John S. Wojtowycz

MEMBERS ABSENT

Thomas Beck, Ph.D.
Ms. Anita Doreen Smith
Gregory Smith, CHP
David O'Neill, Ph.D.

OTHERS PRESENT

Maryland Department of the Environment Staff/ Radiological Health Program (RHP):

Ms. Eva Nair, Manager, Radiological Health Program
Ms. Shannon Page, Radiological Health Program
Mr. Atnatiwos Meshesha, Radiological Health Program

Ms. Kerry Lewis, Radiological Health Program, Recording Secretary

Meeting Convened

The April 2022 Radiation Control Advisory Board (RCAB) meeting was held virtually on Google Meets and was called to order at 10:05 a.m. by the RCAB Chair, Sean Austin.

Introduction

The RCAB Chair completed roll call and introduced Malek Daneshvar as the newly appointed board member.

COVID 19 Impact and RHP Staff Changes

RHP underwent several personnel changes, some seasoned individuals and highly talented young staff moved on. Staff have also moved from contractual to permanent positions and between Divisions. A Technical Planning Section has been created to handle general licensing, enforcement, radon, website development, reciprocity, and legislative actions.

To address staff turnover levels and improve the ability to compete with the private sector from a salary perspective, the Maryland Department of Environment requested salary increases for new technical staff hires, current Health Physicists, and supervisors. Even with boosting salary levels, maintaining a full staff continues to be an issue. To attract qualified individuals, RCAB suggestions included: internships, college outreach, job fairs and posting on professional sites such as the Health Physicist Society.

Communication with Regulated Community

RHP experienced numerous changes during COVID 19 especially towards the early part of 2020. These changes impacted our operations, and RHP was not able to perform our permitting actions as quickly as we would like. Inspections ceased in March 2020 and resumed in June/July 2020.

Email is currently the most effective method for communication and RHP has set up dedicated email addresses to receive and send documentation to facilities, licensees, private inspectors, and service registrants. RHP is working towards an online database system that will allow facilities to access and submit all documents into a portal.

Overview of Qualification Checks - Authorized Users (AU's), Authorized Medical Physicists (AMP's) and Radiation Safety Officers (RSO's)

The Radioactive Materials Division underwent a Nuclear Regulatory Commission (NRC) Integrated Materials Performance Evaluation Program in July 2021 which showed the need for an extensive qualification review of AU's, AMP's, and RSO's. To comply with the findings, the RHP has been reaching out to licensees to request additional information that will satisfy the requirements of the NRC.

Update on Diagnostic Medical Radiation Events (DMREs)

Of the 1,470 registered hospitals, mammography, and medical facilities, 143 facilities reported 300 DMREs over the extended 3-year period (2018-2022) of study performed by the RHP. This averaged out to approximately 100 events over the 3-year period. This constitutes 9.7 % of the total registered facilities in the State of Maryland. Statistically, this means that 90.3% the Maryland facilities did not report a DMRE in the last 3 years. There was a peak in events in 2019 and a drop in 2020. The decline mainly occurred during COVID 19.

For the 5-year period (October 2016-present) of study performed by the RHP, of the 258 facilities reporting DMREs, there were 627 events averaging 125 per year. The ranking of event occurrences indicated Baltimore City had the highest number of reported events, followed by Baltimore County and Howard County. The study showed that medical facility staff serving over 10 years were involved in more occurrences. In addition, it was found that most events occurred at night. Due to the lack of investigation by the medical facilities, there were fewer procedural corrective actions taken and more corrective actions taken against individuals. Currently RHP is collecting and evaluating data on DMREs, a determination for assessing penalties has not been made at this time.

Regulations Update

Supplement 31 – RHP adopted NRC’s Regulations Amendment Tracking System (RATS) and is currently posted online. Supplement 31 comprised of the following:

- Adopt the Nuclear Regulatory Commission (NRC) Regulations RATS 2018-1 and 2018-2.
- Incorporate RATS 2018-1 – Medical Use of Byproduct Material – Medical Event. Definitions, Training and Experience, and Clarify Amendments 10 CFR Parts 30, 32, 35
- Make minor corrections to RATS 2018-2.

Supplement 32 comprises of the following:

- Revise the Electronic Brachytherapy regulation in Sections F.8 and F.9.
- Incorporate the NRC RATS 2018-3, 2019-1, 2019-2, 2020-1, 2020-2, 2020-3.
- Miscellaneous corrections including a correction to RATS 2018-1 by adding the words “...or equivalent NRC requirements or Agreement State requirements.” within Sections G.300 and G.690.

Supplement 32 is expected to be final in October 2022 depending on public comment in August.

Old Business

The Minutes from April 2, 2019, meeting was approved with one correction, the spelling of Dr. Jeanette Linder’s first name was corrected.

Meeting Closed

The meeting was adjourned at 2:37 p.m.