



US Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington DC 20555-001

And

Regional Administrator
USNRC Region IV
1600 E Lamar Blvd
Arlington TX 76011

June 11, 2021

Reply to a Notice of Violation
License 25-10994-04 Docket Number 030-33305

Violation: Specifically, the licensee failed to perform a prospective evaluation of an unmonitored authorized user's extremity dose and did not provide extremity dosimetry, as a ring badge required to be worn during fluoroscopy and therapeutic treatments using yttrium-90 to meet the applicable requirements in 10 CFR Part 20

Exception: The licensee DOES provide extremity dosimetry to the personnel that need it. The issue is noncompliance on the part of the AU's to wear them during Y90 procedures

Information: Y90 is a beta emitter that is delivered to the Cath Lab in a shielded container and enclosed in an additional delivery box that is made of Plexiglas and provides additional shielding to the user. The information provided to us from the manufacturer, Sirtex, indicates that the dose to a physician's hands for a typical procedure is 32 mrem/case. (please refer to Section 9 of the attached information sheet) We have a very low caseload (8 cases since 2018). These two aspects indicate <10% of the allowable extremity dose of 500,000 mrem could be expected to be received by the AU. This was described to the inspector in an email dated April 30, 2021, (attached)

Reason for the violation:

Physician AU ring badges are showing "m" for "minimal" readings.

Corrective steps that have been taken and the results achieved:

Physician authorized users have been reminded of the importance of wearing their issued ring badges during fluoroscopy with Y90 treatments and for all uses of radiopharmaceuticals.

In addition, a review of proper dosimetry has been added to the "TIME OUT" section of the y90 procedures.

Corrective steps that will be taken:

Continued monitoring of correct wearing of exposure dosimetry badges and rings

Date when full compliance will be achieved:

Next Y90 is scheduled for June 24, 2021

If you have any questions about this response please address them to our Radiation Safety Officer, Kari Cann, MS DABR at Kcann@Bozemanhealth.org or 406-788-7887

Jacqueline Sikoski

Jacqueline Sikoski
Administrator
Bozeman Health Deaconess Hospital
915 Highland Boulevard
Bozeman, MT 59715

Kari Cann

Kari Cann
Radiation Safety Officer
Bozeman Health Deaconess Hospital
915 Highland Boulevard
Bozeman, MT 59715