

From: Joe Rodgers <RodgersJ@Theragenics.com>
To: Eric Jameson <EJameson@dnr.state.ga.us>
Date: Wednesday, 10 August, 2005 09:33:26
Subject: RE: draft copy of TheraSeed SS&D certificate

Eric,

Thanks for sending this draft SDR. I will my comments to you NLT COB Friday August 12th. Here is the calculated in-air exposure rates for a 2.2 U (1.701 mCi app) and 54.306 U (42.0 mCi apparent).

In Air Exposure Rate (mR/hr) for TheraSeed Model 200

Seed Strength
 2.20
 U

U/mCi
 1.293

Seed Activity
 1.701
 mCi (app)

Gamma Constant
 1.48
 (R cm²)/(mCi hr)

2.20 U (1.701 mCi apparent)
 54.306 U (42.0 mCi apparent)

Distance (cm)
 Exposure Rate (mR/hr)
 Exposure Rate (mR/hr)

5
 100.73
 2486.40

30
 2.80

for 2.2U seed:
 at 1m, Dose Rate = $\frac{1.48 \text{ R cm}^2}{\text{mCi-hr}} \times \frac{1.701 \text{ mCi}}{1 \text{ R}} \times \frac{10000 \text{ mR}}{25 \text{ cm}^2} \times \frac{1}{(100 \text{ cm})^2}$

69.0667

100

0.25

6.2160

Best regards,
Joe

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-----Original Message-----

From: Eric Jameson [mailto:EJameson@dnr.state.ga.us]
Sent: Tuesday, August 09, 2005 3:40 PM
To: RodgersJ@Theragenics.com
Subject: draft copy of TheraSeed SS&D certificate

Joe,

Attached is a draft copy of the TheraSeed SS&D certificate as discussed.

I am forwarding the cert to concurrence review. Currently, I have included inverse-square calc values for 30cm and 100cm in the External Radiation Levels section. These are based on values in water, as was provided. I will incorporate the "in air" values after you provide them.

Please review to verify accuracy/intent and to be sure I have maintained an appropriate level of confidentiality.

Sincerely,

CC: John Lobdell <LobdellJ@Theragenics.com>, Mary Napolitano <NapolitM@Theragenics.com>