

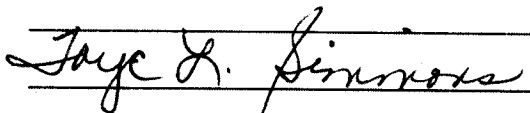
KARMANOS CANCER CENTER

License No. 21-04217-06

Dr. Rakowski, I reviewed your application for renewal as well as your letters dated August 7, 2015 and October 6, 2015. As a result of my review I have a number of issues that need to be resolved before I can proceed with the renewal. Please respond to the following in writing:

1. Subitem 6.N. of amendment no. 68 was not mentioned in your renewal. Please provide information regarding the status of this device.
2. In your letter dated August 7, 2015, you requested a new Total Body Irradiator with a maximum activity twice that of your current unit. Please provide shielding calculations for the new device.
3. Please confirm the following: licensed material listed in Subitems 6.A. through 6.N. of your license will be used and stored at 4100 John R. Street and licensed material listed in Subitems 6.K. thru 6.M. may be used at 3990 John R. Street. If this is not correct please specify where the radioactive material will be used by addresses only.
4. Please provide the current joint operating agreement which was signed on October 6, 2010. Please review and confirm that this agreement continues to be needed.
5. According to the last NRC inspection, the Gammabeam Irradiator has not been used for a number of years. Please provide the status on this device.
6. Please provide a "Delegation of Authority for the Radiation Safety Officer. (a sample is attached for your review and/or use)
7. Please review all of the diagrams provided with your renewal application to assure that all room numbers are correct. If not provide corrected diagrams. There is also some confusion between what was submitted in your application and what is reflected in License Condition 10 of your license.
8. Please confirm that PET is not being used. If it is being used, provide shielding calculations for PET use rooms, i.e. quiet room.
9. Page 32 of your renewal application heading is "Revised shielding calculations for new HDR Room (Radiation Oncology Center, Harper Hospital)". According to your current license the HDR unit is housed at Karmanos Cancer Center. Please verify where the Flexitron HDR unit is used and housed.
10. According to the NRC inspection report dated October 1, 2015, as corrective action, you revised two procedures which were submitted with your application. Please provide the revised procedures for "Radiation Safety Survey and Source Calibration for Flexitron-HDR" and "Daily QA for the Flexitron Ir-192 Unit".

Please respond to the above in writing by **December 15, 2015**. You may scan your response with a signed and dated cover letter and email to toye.simmons@nrc.gov or you may fax your response/cover letter to 630-515-1078. Please reference control no. 588423 on your response. If you have any questions, please contact me at 630-829-9842.



Toye L. Simmons

11/17/15

Date

Simmons, Toye

From: Simmons, Toye
Sent: Tuesday, November 17, 2015 3:08 PM
To: 'rakowski@karmanos.org'
Subject: Issues regarding Karmanos renewal application
Attachments: image2015-11-17-160031.pdf

Hi, as promised and discussed on 11/17/15, attached are the issues that I am asking you to address so that I can proceed with the renewal.

If you have questions, feel free to call and/or email.

Toye L. Simmons
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