



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

July 19, 2012

Docket No. 03009293  
Control No. 577446

License No. 06-08349-04

Daniel McIntyre  
President and Chief Executive Officer  
Charlotte Hungerford Hospital  
P.O. Box 988  
540 Litchfield Street  
Torrington, CT 06790-0988

SUBJECT: CHARLOTTE HUNGERFORD HOSPITAL, REQUEST FOR ADDITIONAL INFORMATION CONCERNING APPLICATION FOR RENEWAL OF LICENSE, CONTROL NO. 577446

Dear Mr. McIntyre:

This is in reference to your application dated April 26, 2012 requesting to renew Nuclear Regulatory Commission License No. 06-08349-04. Please note that the request dated June 15, 2012 to add the Connecticut Oncology and Hematology PET facility is being addressed separately under Control No. 577809.

In order to continue our review of the renewal application, we need the following additional information:

1. Item 3 of this application lists the name of the facility at 200 Kennedy Drive where the high dose-rate remote afterloader (HDR) unit is used as "Charlotte Hungerford Hospital Radiation Oncology." Your current license lists the name as "The Center for Cancer Care," Please clarify the correct name.
2. Item 5 of this application lists the model number of your Gadolinium-153 sealed sources as Dupont Pharmaceutical "Model NES-6429." Your current license and the Sealed Source and Device Registry authorize "Model NES-8429." Please note that "Model NES-8429" will be retained on your license as currently listed. No response to this item is required.
3. Regarding the description of your facilities and equipment, please clarify the information listed below. Please be aware that information (including diagrams) that provide the exact location of materials or depict specific locations of safety or security equipment should be marked as "security-related information – withhold under 2.390":
  - a. The areas above and below all your areas of radioactive materials use in the main hospital building located on 540 Litchfield Street.
  - b. A three-dimensional scaled diagram of your HDR facility indicating the scale used.

- c. Confirmation that there is no occupiable area below your HDR treatment room.
  - d. A description of the shielding for the door to the treatment room (material type, thickness, density, etc.) and the adequacy of the shielding. In addition, please identify any locations of penetration through shielded barriers (e.g., HVAC ducts or cable pass-throughs) surrounding the HDR treatment room and describe the adequacy of shielding of the penetrations.
  - e. The location of HDR radiation monitors used to indicate source exposure.
4. Your previously submitted letter dated July 26, 2006 indicated that the HDR area radiation monitor would be a Primalert 10 with Primapak II battery back-up (manufacturer – Fluke Medical), and back-up battery testing would be performed on treatment days before patient treatments. Please confirm that the system and testing frequency remain the same.
  5. The HDR shielding calculations in the attachment to your application titled “Quality Management Program for HDR” list a tenth value layer (TVL) in concrete of 4.3 centimeters (cm) for iridium-192 (Ir-192). Please note that NCRP Report No. 49, Appendix C, Table 28, lists this TVL as 14.7 cm. No response to this item is required.
  6. The attachment to your application titled “Quality Management Program for HDR” states that procedures required by 10 CFR 35.643 for HDR periodic spot-checks were submitted, however we were unable to locate this information. Please submit these procedures, including the description of how you will perform each test and the criteria for acceptable results.
  7. The attachment to your application titled “Quality Management Program for HDR” references HDR full calibration procedures and states that they will be performed upon receipt of the device and after every source change, before the device and/or new source is used to treat any patient. Please note that 10 CFR 35.633(a) also requires a licensee to perform full calibration measurements following reinstallation of the unit in a new location outside the facility and following any repair of the unit. No response to this item is required.
  8. The attachment to your application titled “Quality Management Program for HDR” states that HDR emergency procedures were attached, however we were unable to locate this information. Please submit the written procedures required by 10 CFR 35.610(a)(4).
  9. Confirm that extremity monitors will be provided to individuals who may be called upon to respond to an emergency involving an unretracted or stuck HDR source.
  10. Please update the statements in Items 10.4 and 10.5 of your application to match the suggested commitments in NUREG-1556, Vol. 9, Rev. 2 for safe use of unsealed licensed material and spill procedures.
  11. Our understanding is that Gerald J. Randall, your Radiation Safety Officer (RSO), may be an outside consultant/contractor. If this is so, please address the following:

- a. Describe the control over the radiation safety program that will be delegated so that the consultant-RSO will be able to exercise authority over authorized users when confronted with radiation safety problems that require implementation of corrective actions.
  - b. Describe the relationship that will exist between the consultant-RSO and your institutional management regarding expenditure of funds to facilitate the objectives of your radiation safety program and related regulatory requirements.
  - c. Identify other commitments of the consultant-RSO for other NRC or Agreement State licensed facilities, along with a description of how the consultant-RSO will allocate time to permit the performance of the duties of the RSO as described in the regulations. State the consultant-RSO's minimum amount of on-site time (hours per week or month).
  - d. Appoint an in-house representative who will serve as the point of contact during the RSO's absence. This person may be allowed to assist the consultant RSO with limited authority.
  - e. Describe the overall availability of the consultant-RSO to respond to questions or operational issues that arise during the conduct of your radiation safety program and related regulatory requirements. Specify the maximum amount of time it will take the RSO to arrive at the facility in the event of an emergency that requires his presence.
12. In order to facilitate future communications, please provide current contact e-mail address, telephone and fax number for your RSO and senior management representative. In addition, confirm that the e-mail address and telephone numbers for Mr. Randall are used for business and can be released to the public.

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Licensee Toolkits, see our toolkit index page**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control No. 577446. If you have any technical questions regarding this deficiency letter, please call Maryann Abogunde at (610) 337-5090.

In order to continue prompt review of your application, we request that you submit your response to this letter within 30 calendar days from the date of this letter.

Please note that the office of the Region I USNRC Division of Nuclear Materials Safety has moved effective May 9, 2012. Our new address is:

U. S. Nuclear Regulatory Commission  
Region I  
2100 Renaissance Blvd, Suite 100  
King of Prussia, PA 19406-2713

D. McIntyre

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Thank you for your cooperation.

Sincerely,

***Original signed by Sandra Gabriel***

Sandra Gabriel  
Senior Health Physicist  
Medical Branch  
Division of Nuclear Materials Safety

cc:  
Gerald J. Randall, M.S., Radiation Safety Officer

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**SUNSI Review Complete: MAbogunde**

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