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# Geisinger

## Health System

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US Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, Pa. 19406-1415  
Attn: Ms. Sandy Gabriel, Senior Health Physicist

K-8  
MS-16

Licensee: Geisinger Health System  
License: #37-01421-01  
Mail Control: # 138784  
Docket: 03002984

Subject: Amendment Request Dated 4/21/06; Reply to Request for  
Additional Information Dated 6/24/06

July 20, 2006

This is in response to your email dated 6/24/06 requesting additional information in order for you to continue the review of our amendment request dated 4/21/06.

1. We are confirming here that our original amendment request identifying the criteria to be used by our Radiation Safety Committee to approve relocation of high level sources only applies to our existing high activity radiation sources, and not to new high level sources not currently licensed.
2. We are confirming here that our Radiation Safety Committee will only approve blood irradiator relocations if the new location:
  - a. Meets the "Conditions of Normal Use" and "Limitations and Other Considerations of Use" noted on the SSDR Certificates for the specific irradiator.
  - b. Was approved by a Facilities Structural Engineer relative to floor loading, including the path that the irradiator needs to travel to get to its new location
  - c. Has a sufficient level of security to prevent unauthorized access or removal
  - d. Has an automatically-operated fire detection and control system, or, is located in a room where the risk of radiation exposure from fires is very low (such as a ground floor location constructed with fire-resistant materials and with little combustible materials present).
3. With respect to the relocation of our HDR Remote Afterloader units, we are confirming here that our Radiation Safety Committee will only approve the new location if:
  - a. The facility drawings of the new location are to scale with the scale identified, and windows, doors, conduits, and any other design feature that may introduce a gap in the structural shielding is identified. In addition, the room number and chief purpose of the specific location within the building which will house the HDR must be on the drawings, plus the room numbers and title or purpose of each adjacent room surrounding the HDR in all directions, and whether those locations are restricted areas or not, as defined by NRC.

- b. The shielding calculations include the type, density, and thickness of all materials used, assume worst case source positioning, and consider workload under all conditions of source exposure. The calculations must be verified by a second qualified physicist. Radiation measurements made in all adjacent areas in all directions will be noted and in compliance with the NRC limits of 10 CFR 20.1201 and 20.1301.
  - c. The safety features in the new location compare or exceed those in the current location, such as warning systems, locks, signs, warning lights, alarms, interlocks, radiation detectors and their displays, and viewing & intercom systems. The locations of the safety features must be shown to be appropriate for maximum radiation safety.
  - d. Written plans are available which (1) demonstrate conclusively that two different radiation-producing devices cannot operate simultaneously in the room (2) identify emergency response procedures and the location of the procedures and any support equipment (3) define a security plan including methods used to secure the HDR and its console, the treatment room, and all associated keys.
4. We are postponing the request to allow for the transport of certain radiopharmaceuticals by private, exclusive use, air carrier during times of production shortage. Please remove this item (included as Attachment #3 in the 4/21/06 amendment request) from consideration at this time.

We believe this addresses all of the points noted in your email.

Very Sincerely,

*Catherine M. Anderko*

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Geisinger Health System

*Robert W. Davies*

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