

file

JUN 12 1985

Decatur Memorial Hospital  
ATTN: John Wallace  
Radiation Safety Officer  
2300 North Edward Street  
Decatur, IL 62526

Gentlemen:

We have reviewed your application dated March 28, 1985 for an amendment to NRC License Number 12-03332-02 to possess and use iridium-192 wire for interstitial treatment of cancer. Additional information is needed in support of your request. Please respond to the following:

1. In view of the fact that iridium-192 wires exhibit high surface dose rates when unshielded and unavoidable, removable isotope contaminants, please describe in detail the safety precautions you will follow during handling, transfer and storage of the iridium wire. Your description should include precautions which will minimize exposure to personnel and limit the spread of contamination when performing the procedures listed below:
  - a. Unpacking the wire and removing it from its shielded container upon receipt.
  - b. Leak testing the wire and storage container.
  - c. Cutting the wire to the appropriate length and loading it into guide tubes.
  - d. Assaying the wire prior to implantation in the patient.
  - e. Transferring the wire from storage sites to the place of use.
  - f. Maintaining accountability of the iridium-192 wire at all times.

Please be specific when responding to the above. Where applicable, submit descriptions of equipment, shielding and storage-use areas.

2. Specify the method that will be used for determining the radiation doses to the extremities of personnel handling the iridium-192 wire.

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3. Outline the general radiation safety procedures that will be implemented during and following the course of treatment with iridium-192 wire including special instructions that will be provided to the nursing staff. (Appendix L to Regulatory Guide 10.8, October 1980 outlines procedures that the Commission finds acceptable for patients treated with sealed sources. If you intend to apply these procedures to the use of the iridium-192 wire, please so state. Otherwise, submit the procedures you intend to follow.)

We will continue the review of your request upon receipt of this information. Please reply in duplicate within 30 days and reference Control No. 78631.

Sincerely,

Original Signed By  
B.J. Holt  
Materials Licensing Section

RIII

Holt/cm  
06/04/85

*bj*  
*11/10/85*