GEORGETOWN UNIVERSITY
MEDICAL CENTER
WASHINGTON, D.C. 20007

RADIATION CONTROL OFFICE
305 KOBER COGAN BLDG.
(202) 625-2107

October 7, 1985

Applicant Oct 7th
Check No. 213424
Amount Fee Category $120 (7B) *
Type of Fee AMD
Date Check Rec'd 10/21/85
Received By BK

* Item 2. is not an irradiator. For NRC purposes 7B fee OK WJ

John E. Glenn, Ph.D.
U.S. Nuclear Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Dr. Glenn:

This is a request to amend Georgetown University Medical Center Byproduct Material License #08-01709-04 to permit use of Gamma-Med Remote Afterloader, Model II-i, Manufactured by Mick Radio-Nuclear Instruments, Inc., 1470 Outlook Ave., Bronx, N.Y. 10465. Model II-i is identical to Model II, which we are currently licensed to use, except that it incorporates an indexer, described in Enclosure (1), which permits the source to be applied in up to twelve separate applicator needles. Permission is also requested to use an additional Ir-192 sealed source, Model GM252:20-001, which is also described in Enclosure (1). No change in the possession limit for Ir-192 sealed sources for use in the Gamma-Med afterloader is requested.

We would further like to amend the license to include use of a Bone Mineral Anaylzer, Model DP-3, Manufactured by Lunar Radiation Corporation, 916 Williamson Street, Madison, Wisconsin, 53703. This Analyzer requires a 1.2 curie sealed source of Gadolinium-153. A 2.0 curie possession limit is requested. Information concerning this analyzer and the source is included as Enclosure (2).

Sincerely,

RECEIVED '85 OCT 21 A11:11 U.S.N.R.C. LIC. FEE MGMT. BRANCH

Warren W. Schadt
Warren W. Schadt, Ph.D.
Director, Radiation Control

John Rose
John C. Rose, M. D., Chairman
Committee on Radiation Control

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WWS:dyj
Enclosures

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ENCLOSURE 1

Office Memorandum • GEORGETOWN UNIVERSITY HOSPITAL

To: John C. Rose, M.D., Chairman
Committee on Radiation Control

Date: 8/21/85

From: James E. Rodgers, Ph.D.
Director of Radiation Physics
Department of Radiation Medicine

Subject: Request to Amend our U.S. NRC Material License

The Department of Radiation Medicine is currently licensed to use a Gamma Med II remotely controlled irradiator for treatment of humans. This unit has a single 10 Ci (nominal) source of Ir^{192} which is attached to a motorized cable and which can be programmed for exposure at specific locations in the applicator (needle). It is licensed for use in the recently shielded Ambulatory Operating Room No. 2 of the C.C.C. Building and in the linear accelerator room (Clinac-18 Room) of the Department of Radiation Medicine.

We seek to amend the license to permit the replacement of the Gamma Med II unit with a new model, Gamma Med II-i, which is essentially the same except as follows: (1) the new unit has a 12 channel INDEXER which permits the source to move sequentially from one applicator to the next (up to 12) without intervention by the operator to reconnect the guide tube; and (2) the new unit can use a new design of source which is smaller in diameter and more suitable for interstitial radiation therapy. Since the new unit can use both the current and the newer interstitial source designs, we want the license to allow possession of either source type. Additional information is contained in the attached draft letter to the NRC.

Since a replacement unit is on order and expected to arrive in early October, we would like to get this amendment request to the NRC for approval as soon as possible.

It is my understanding, with Mr. Baggett of the NRC, that there are no anticipated problems for a quick approval since the unit has been previously reviewed by the NRC.

cc: A. Dritschilo, M.D.

JR/avw

Office Memorandum • GEORGETOWN UNIVERSITY HOSPITAL

DRAFT

To: U.S. NRC
Licensing Section, Region I

From: Georgetown University

Date: 8/21/85

Subject:

Georgetown University seeks to amend its license to replace the current Gamma Med II and with a new model (Gamma Med II-i) which is essentially the same except as follows: (1) the Gamma Med II-i model has an INDEXER which permits the use of an array of many (up to 12) applicators in a single setting without the need for the operator to reconnect the source cable guide tube between applicators. It can be programmed to expose the source at specified positions in each of the applicator needles. The operation of the INDEXER has been previously detailed to the NRC in the attached letter addressed to Mr. Steve Baggett dated April 15, 1985; and (2) This unit permits the use of a different source design (model GM 252:20-001), which is made by the same manufacturer as the currently licensed source, and which is smaller in diameter thus permitting use of 16 gauge needles for interstitial procedures. This "interstitial source" (drawing attached) comes in the same nominal 10 Ci activity of Ir^{192} as that currently licensed. Georgetown University would like to be licensed to possess either one of these sources at one time. Thus, there will be no change in the current possession limit (15 Ci).

The approved locations of use and radiation safety procedures for the Gamma Med unit will continue to be followed as currently licensed with the addition of a step to verify the operation of the INDEXER before clinical usage. The calibration procedure will be unchanged although an anisotropy factor for the interstitial source may be included if determined, by measurement, to be significant.

JR/avw