



**BON SECOURS
RICHMOND HEALTH SYSTEM
RICHMOND RADIATION ONCOLOGY CENTER
BON SECOURS HEALTH SYSTEM**

MS 16

J-9

45-25187-01
03032638

FAX COVER SHEET

DATE: 1/16/08

TO: TARA Weidner

FAX:
FROM: VAN McComas

PHONE: 804-266-7762

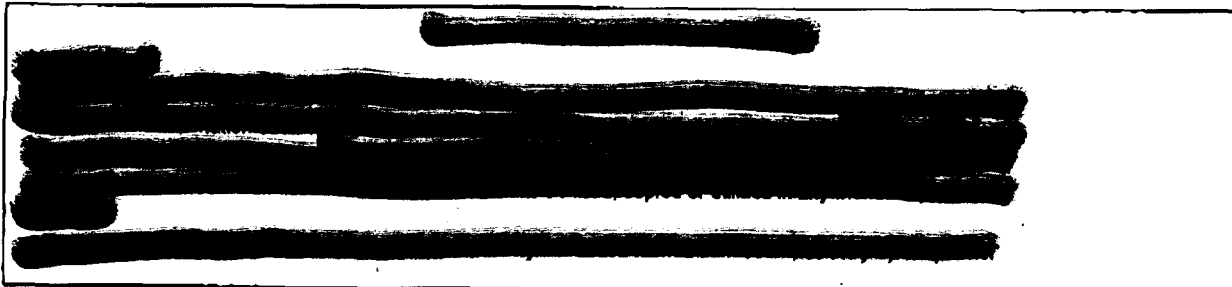
FAX: 804-266-7994

To 610-337-5269

NUMBER OF PAGES INCLUDING COVER SHEET: 5

MESSAGE:

NRC License with Dr. Ah! as Authorized User
and RSU. I'll get more documentation for
current TRAINING ASAP. Since exchange around Feb. 1
for emergency TRAINING with dummy source.



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U.S. NUCLEAR REGULATORY COMMISSION

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MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Commonwealth Cancer Institute 2. 7124 Hull Street Road Richmond, Virginia 23235	3. License number 45-25422-01 4. Expiration date June 30, 2003 5. Docket No. 030-34633 Reference No.

6. Byproduct, source, and/or special nuclear material Iridium 192	7. Chemical and/or physical form Sealed sources (BYK Mallinckrodt Model C1 LBV)	8. Maximum amount that licensee may possess at any one time under this license 2 sources; 1 source not to exceed 444 terabecquerels (TBq) [12 curies (Ci)], and 1 source not to exceed 370 TBq (10 Ci)
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9. Authorized Use:

One source to be used in a Nucletron Model MicroSelectron-HDR No. 80.0 remote afterloading brachytherapy device for interstitial, intraluminal, and intracavitary radiotherapy in humans. The source activity may not exceed 370 TBq (10 Ci) at the time of installation. One source in its shipping container for source replacement.

CONDITIONS

- 10. Licensed material shall be used only at the licensee's facilities located at 7124 Hull Street Road, Richmond, Virginia.
- 11. A. The Radiation Protection Officer for this license is Mohammed M. Ali, M.D.
- B. The Medical Physicists for this license are Arnold M. Able, M.S., Jordie A. Keck, M.S., and Jason Senn, M.S.

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12. Authorized users:

- A. Mohammed M. Ali, M.D. Medical uses for interstitial or intracavity treatment of cancer.
- B. Khadijeh Zarkoob, M.D. Medical uses for interstitial or intracavity treatment of cancer.
- C. J. Scott Roberts, M.D. Medical uses for interstitial or intracavity treatment of cancer.
- D. Marcus W. Brown, M.D. Medical uses for interstitial or intracavity treatment of cancer.

13. In lieu of 10 CFR 35.404(a), immediately after retracting the source from the patient into its shielded position in the remote afterloading device, a radiation survey shall be made of the patient and the remote afterloading device with a portable radiation detection survey instrument to confirm that the source has been removed from the patient. Records of the survey shall be maintained in lieu of the record required in 10 CFR 35.404(b).

14. The sealed source(s) specified in Item 7, shall be tested for leakage and/or contamination as required by 10 CFR 35.59.

15. The following shall be performed only by persons specifically authorized by the Commission or an Agreement State to perform such services:

- A. Installation and replacement of the sealed sources contained in each high dose rate remote afterloading brachytherapy unit.
- B. Maintenance or repair operations on any high dose rate remote afterloading brachytherapy unit and associated equipment involving work on the source safe, the source driving unit, or other mechanism that could expose the source, reduce the shielding around the source, or compromise the safety of the unit and result in increased radiation levels.

16. In lieu of the source inventory described in 10 CFR 35.406, the licensee shall:

- A. Promptly determine that all sources have returned to the safe, shielded position at the conclusion of each high dose remote brachytherapy procedure.
- B. Promptly make a survey of the area of use to confirm that no sources have been misplaced.
- C. Make a record of the survey including survey instrument used, dose rate, time, date and name of the individual making the survey.
- D. Retain the record of the survey in lieu of the record required in 10 CFR 35.406(d).

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17. Prior to initiation of a treatment program, and subsequent to each source exchange for each high dose rate remote afterloading brachytherapy unit, a radiation survey shall be made of :
- A. The source housing, with the source in the shielded position. The maximum radiation levels at 10 centimeters from the surface of the main source safe shall not exceed 1 millirem per hour.
 - B. All areas adjacent to the treatment room with the source in the exposed position. The survey shall clearly establish:
 - (1) That radiation doses to occupationally exposed individuals do not exceed the limits specified in 10 CFR 20.1201(a), 20.1207 and 20.1208, and
 - (2) That radiation doses to individual members of the public do not exceed the limits specified in 10 CFR 20.1301(a).
18. A. Access to the room housing the high dose rate remote afterloading brachytherapy unit shall be controlled by a door at each entrance.
- B. Each entrance to the treatment room shall be equipped with an electrical interlock system that will cause the source to return to the shielded position immediately upon opening of the entrance door. The interlock system shall be connected in such a manner that the source cannot be placed in the irradiation position until the entrance door is closed and the source "on-off" control is reset at the control panel.
- C. Electrical interlocks on the entrance door to the treatment room shall be tested for proper operation at least once each day of use.
- D. In the event of malfunction of the door interlock, the remote afterloading brachytherapy device shall be locked in the "off" position and not used, except as may be necessary for repair or replacement of the interlock system, until the interlock system is shown to be functioning properly.
19. A. The licensee may not possess and use materials authorized in Items 6, 7, and 8, until: 1) the licensee has constructed facilities and obtained the equipment described in the application and supporting documentation; and 2) the U.S. Nuclear Regulatory Commission, Region II, ATTN: Chief, Nuclear Materials Licensing/Inspection Branch, has been notified in writing that activities authorized by the license will be initiated.
- B. In accordance with the requirements set forth in 10 CFR 30.36(d), the licensee shall promptly notify the Nuclear Regulatory Commission, in writing of a decision not to complete the facility, acquire equipment, or possess and use authorized material.

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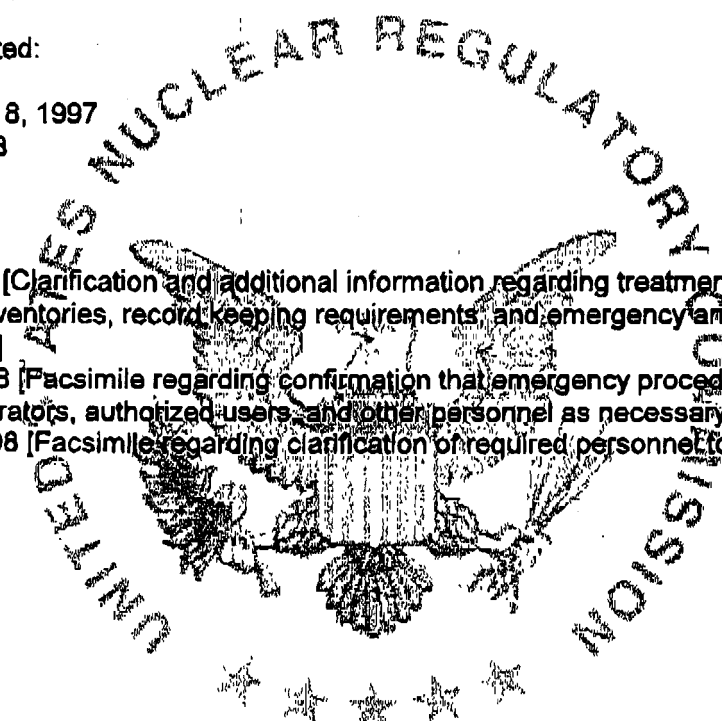
20. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Applications dated:

- 1) December 18, 1997
- 2) April 2, 1998

B. Letters dated:

- 1) May 7, 1998 [Clarification and additional information regarding treatment room drawing, physical inventories, record keeping requirements, and emergency and maintenance procedures]
- 2) May 27, 1998 [Facsimile regarding confirmation that emergency procedures will be provided to device operators, authorized users, and other personnel as necessary]
- 3) June 22, 1998 [Facsimile regarding clarification of required personnel to be present during HDR treatments]



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

JAY L. HENSON

DATE JUN 23 1998

BY Wade J. Loo for

Region II, Division of Nuclear Materials Safety
61 Forsyth Street, S.W., Suite 23T85
Atlanta, Georgia 30303

N:ACTIVE45-25422.N01