

REGIONAL RADIATION THERAPY CENTER

500 KEENE STREET
COLUMBIA, MISSOURI 65201
(314) 443-4531

MURRAY BOLES, M.D., Director
ALESSANDRO M.V. RICCI, Ph.D., Physicist

April 10, 1984

U.S. Nuclear Regulatory Commission
Region III, Materials Licensing Section
799 Roosevelt Road
Glen Ellyn, IL 60137
ATTN: Patricia Vacherlon

CONTROL NUMBER 76211

Dear Madam:

As per your request dated March 30, 1984, here is the additional information required to complete our license application:

- (1) The Radiation Safety Officer (RSO) of the Regional Radiation Therapy Center (RRTC) will calibrate our survey instruments;
- (2) The transport of the sources to the Columbia Regional Hospital (CRH) will actually be handled by the user, i.e. the radiotherapist, with the following instructions:
 - (a) The sources are to be kept in the appropriate container - i.e., the transporting shielded cart for the Cs-137 sources, and the shipping container for all the other sources - from the Radioisotope Room (RIR) to the treatment room;
 - (b) The emergency entrance to the CRH is to be used and its adjacent elevator up to the fourth floor where the sources are to be taken directly to the treatment room.
- (3) (a) The RSO, or a qualified person specifically designated by him in his absence, is in charge of the custody of the sources, as well as of ordering, receiving, storing, dispensing, and returning the sources to storage after treatment.
(b) A logbook is kept in the office of the RSO containing at all times the up-to-date location of all the radioactive sources of which the RRTC is in possession. The RSO is responsible for keeping this logbook up to date. A photocopy of the up-to-date status of the sources as shown in the logbook is available in the RIR. The logbook shall contain the description of sources, their present location, number of sources checked out for treatment, the implantation and removal dates and times, the time and date of release from storage and of return to storage.

*These are excerpts from
Regional Radiation Therapy
Center's license covering
the procedures for Group VI
sealed sources.
Last page is agreement dated
1/20/84 signed by David Jinkel.
This agreement is in tie-down cond.*

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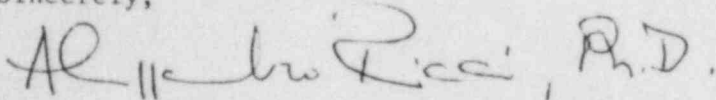
RE: CONTROL NUMBER 76211

April 10, 1984

- (c) Quarterly inventory of all the radioactive sources in possession of the RRTC will be done by the RSO for verifying the running inventory as shown by the logbook. Record of these quarterly inventory will be entered by the RSO in the logbook.

Hoping that you will deem this information adequate, and trusting that you will promptly review our application for a much needed license, I thank you for your attention.

Sincerely,

A handwritten signature in dark ink, appearing to read "Alessandro M.V. Ricci, Ph.D." with a stylized flourish at the end.

Alessandro M.V. Ricci, Ph.D., Radiation Safety Officer
Regional Radiation Therapy Center
500 Keene Street, Suite 203
Columbia, MO 65201

AMVR/ca

General Rules for Safe Use of Radioactive Materials

1. Always wear disposable gloves and always use long forceps when handling radioactive sealed sources, and never hold the latter directly with your hands.
2. Always plan ahead your handling of radioactive sources, so as to make it as expeditious as practicable.
3. In the Radioisotopes Room (RIR) always keep the radioactive sources inside the clearly marked area behind the L-block and as close as possible to the base of the L-block, except for the brief time required to load them into the transportation cart or the shipping container.
4. The radioactive sources can be used only with the previous explicit authorisation from the Radiation Safety Officer or a person specifically delegated by him.
5. A logbook kept in the Radiation Safety Office must at all times contain the location of all the radioactive sources of which the Regional Radiation Therapy Center is in possession. An up-to-date copy of the status of the radioactive sources must be also present at the entrance of the RIR .
6. The radioactive sources, when outside the RIR, must be either in the cart assigned for their transportation, or in their shipping container, except for the time required by the user for implantation into the patient, or for the purpose of effecting instrument calibrations.
7. Only the sources expected to be used, either for implantation or for calibration procedures, may be taken out of the RIR. In the case of implantation the user will be accountable for the sources until they are returned -- promptly as soon as they are removed from the patient -- to the RIR or, in the case of a permanent implant, until the implantation is considered completed. When a permanent-implant patient is dismissed after implantation, the user radiotherapist or his designee will instruct the patient on all the procedures to be followed in order to ensure proper radiation protection.
8. The radioactive sources, when ^{FOR} radiation brachytherapy will be taken from the RIR of the RRTC, by the shortest path and without unnecessary pauses to the room especially reserved in and by the Columbia Regional Hospital for radiation brachytherapy patients (see letter of agreement from the Columbia Regional Hospital).
9. The general-purpose film badge and the ring badge will always be worn when handling radioactive sources.
10. The Radiation Safety Officer will test for leakage all the Cs-137 sources every three years.

EMERGENCY PROCEDURES

The emergency procedures adopted by the Columbia Regional Hospital (CRH) with its NRC Materials License No.24-16281-01, will be followed.

The Radiation Safety Officer (RSO) of the Regional Radiation Therapy Center(RRTC) or his qualified designee will be available at all times to handle, under the final supervision of the RSO of the CRH, any radiation safety-related emergencies that might arise for RRTC patients treated with radiation brachytherapy at the CRH.

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12 Jan 1984

to 16281

THERAPEUTIC USE OF SEALED SOURCES

All the radiation brachytherapy procedures on patients of the Regional Radiation Therapy Center (RRTC) will be performed at the Columbia Regional Hospital (CRH).

All the procedures adopted by the CRH with its NRC Materials License No.24-16231-01 will be followed. The Radiation Safety Officer of the RRTC or his qualified designee will take care of all the requirements related to radiation protection -- both of routine and of emergency nature -- as expressed in the aforementioned procedures, and under the final supervision of the Radiation Safety Officer of the CRH .

Item 20

Prepared 12 Jan. 1984

Columbia Regional Hospital hereby agrees to:

1. Admit RRTC* patients for radiation brachytherapy treatment;
2. Establish the use of only Room 419 and Room 420 at Columbia Regional Hospital for radiation brachytherapy (of RRTC patients); Room 420 having to be used for brachytherapy patients only in the case when another radioactive patient is already occupying Room 419;
3. Whenever the room is occupied by a radiation brachytherapy patient, have the bed in Room 419 positioned against the East wall and as close to the window as possible; and to keep the bed in its lowest position, except for brief times required for some of the patient attendance;
4. Provide each room with a 1" - thick, about 15" x 35" (height x width) bedside lead shield, for protection of the personnel attending the patient within the room;
5. Provide a loading lead shield to be used during implantation of radioactive sources (1" thick, about 15" wide, 20" vertically long, top at about 40" above the floor);
6. Provide a foot-of-the-bed lead shield (1/2 thick, 61" wide, 32" vertically long, top at about 49" above the floor) to be positioned right against the foot of the bed in Room 419, if only one radioactive patient is present, or in room 420 if two radioactive patients are present.
7. Vacate Room 420, if only one brachytherapy patient is present, or Room 421 if two brachytherapy patients are being treated, upon request from the RSO** of the RRTC, should it deem it necessary in order to bring the exposure rate down to not more than 2.0 mR/hr everywhere outside the radiation brachytherapy patient room(s).

David Finkel
Administrator

1/20/84
Date

*Regional Radiation Therapy Center
**Radiation Safety Officer

Case No. 76211

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