MS-16
Q0

Main Line Women's Imaging Center
#2 Bala Plaza
Bala Cynwyd, Pennsylvania 19004

January 21, 1986

John E. Glenn, Ph.D., Chief
Nuclear Materials Safety Section B
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Dear Dr. Glenn:

This letter is in response to your inquiry dated January 2, 1986, Control No.104761.

#1 a. The manufacturer and model number of the Gadolinium 153 sealed source is New England Nuclear #NER 430. NEN'S license number for the (1) one Curie Gadolinium 153 source is NR 476 - S1535, Registration # ANSI N542 - 1977. The source shall be leak tested prior to shipment by NEN and a certificate supplied with the source upon delivery. The source will be tested for leakage at six month intervals as described in Item #2 below. A total activity of 2.5 Curies is requested so that we do not exceed our possession limit during the transfer of sources.

b. The manufacturer of the bone densitometry unit is Lunar Radiation Corporation - Madison, Wisconsin and Model DP-3 is the unit of choice. Only one instrument and one source will be used in the facility at this time. Should the practice expand in the future, an amendment will be requested at that time for additional units and sources.

#2. The leak test kit we will use is supplied by Siemens Gammasonics, Inc.; Model # QT - 1. Please refer to NRC #12-00369-01 for detailed information regarding the instrumentation used to assay test samples. A copy of the leak test procedure is attached.

#3. Procedures for receiving packages containing radioactive materials during off-duty hours shall be as outlined in Item 13 of the license application. Security personnel monitor the building 24 hours a day, and will be inserviced prior to the day the delivery is scheduled. If the package appears wet or damaged, the security officer will be instructed to contact me immediately, and ask the courier to remain at the office until it has been determined that no contamination exists.

The entrance to the Bone Densitometry Scan Room will be secured by a door with a keyed lock. Only authorized personnel will hold a key to this door. The room will be locked when authorized personnel are not present.

#3. (continued)
Monitoring shall be performed as soon as practicle after receipt as described in 10CFR 20.205. The Radiation Safety Officer or his designee will assure that radiation levels in unrestricted areas do not exceed the limits specified in 10CFR 20.105, by draping the source container with lead shielding if necessary. The adjacent rooms are not occupied during off-duty hours.

I hope that this additional information will satisfy your concerns regarding the radiation safety program that we will establish. Please contact me if you have any further questions.

Sincerely,

Barry R. Smoger, M.D.
Radiation Safety Officer

Enclosure

SIEMENS

QT-1 Leak Testing Instructions For Sealed Sources

1). Leak tests may only be performed in accordance with your state and/or Federal License(s).

2). Make certain the source is in its shield or the shutter mechanism is closed (where applicable).

3). Remove the cotton swab from its test tube and moisten with alcohol or a mild detergent solution.

4). Don the pair of latex gloves and carefully wipe the external surface of the fixture, gauge, shield, etc. Wherever, in the event of source leakage, contamination would most likely appear (weld beads, bolt heads, nuts, washers, obvious dents, rust, circumference at base of opening or closing shaft or shutter slide mechanism, if exposed, etc.)

5). Return the swab to its tube and remove the latex gloves. Identify the test tube using the source serial number and the label provided. Put the tube and gloves back in the box.

6). Complete the enclosed information sheet, place in box, and return the material to us using the label provided with the kit.

7). Analysis of leak test samples will be performed by qualified personnel and a Certificate confirming the results will be promptly mailed. In the event that removable contamination, in excess of 0.001 microcurie is observed, we will contact you immediately.

SIEMENS GAMMASONICS, INC.
Health Physics Services
2000 Nuclear Drive • Des Plaines, IL. 60018 • Telephone (800) 323-6015 • (312) 635-3387

QT-1 LEAK TEST DATA

RADIONUCLIDE (ISOTOPE) _____

ACTIVITY _____

SOURCE MANUFACTURER _____

CALIBRATION DATE __ __ / __ __ / __ __ __ __

SOURCE MODEL _____ SERIAL NUMBER_____

PERSON PERFORMING LEAK TEST _____

DATE OF LEAK TEST __ __ / __ __ / __ __ __ __

AUTHORIZING SIGNATURE _____

NOTE: POSTAL REGULATIONS REQUIRE THAT THE DOSE RATE FROM THIS KIT BE LESS THAN 0.5 MR/HR. AT THE SURFACE WHEN MAILED. SURVEY THE ENVELOPE AND IF THE DOSE RATE EXCEEDS 0.5 MR/HR., CALL HEALTH PHYSICS SERVICES FOR INSTRUCTIONS.

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FOR SIEMENS USE ONLY

DATE COUNTED __ __ / __ __ / 19 __ __ . PROCEDURE _____

OPERATOR _____

BACKGROUND _____ COUNTS _____ RESULTS _____

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