NRC Form 374A (5-84) U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number: 48-02435-01

Docket or Reference number: 030-03431

Amendment No. 44

St. Michael Hospital
Radiology Department
2400 West Villard Avenue
Milwaukee, WI 53209

In accordance with letter dated May 8, 1985, License Number 48-02435-01 is amended as follows:

Items 6., 7., 8., and 9. are amended to add:

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
G. Gadolinium-153	G. Sealed sources (Gulf Nuclear, Inc. Model GD-1)	G. 2 sources not to exceed 1.5 curies each
H. Iodine-125	H. Sealed sources (AECL Model Nos. C235, C234 or Amersham Corp. Model IMC.P2 in source holders)	H. 2 sources not to exceed 300 millicuries each
I. Iodine-125	I. Sealed sources (AECL Model No. C324 in Nuclear Data, Inc. source holder)	I. 2 sources not to exceed 200 millicuries each

9. Authorized Use

G. One source to be used in a Lunar Radiation Corporation Model DP3 Spine Scanner for analysis of mineral content in human bone. One source for source replacement purposes to be stored in its shipping container.

H. One source to be used in a Lunar Radiation Corporation Model DP2 Forearm Scanner for analysis of mineral content in human bone. One source to be stored in its shipping container for source replacement purposes.

I. One source to be used in a Nuclear Data, Inc. Model No. ND1100 Bone Density Scanner for analysis of mineral content in human bone. One source to be stored in its shipping container for source replacement purposes.

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Conditions 12. and 20. are amended to read:

12. Licensed material listed in Item 6 above is authorized for use by, or under the supervision of, the following individual(s) for the materials and uses indicated:

Harold F. Ibach, M.D.	Groups I, II, III, IV and V Xenon-133 In vitro studies Bone mineral analyzers
Daniel Price, M.D.	Groups I, II, III, IV and V Xenon-133 In vitro studies Bone mineral analyzers
Edward R. Kinsfogel, M.D.	Groups I, II and III Iodine-131 for treatment of hyperthyroidism and cardiac dysfunction In vitro studies Xenon-133 Bone mineral analyzers
Herbert J. Zimmers, M.D.	Groups I, II and III Iodine-131 for treatment of hyperthyroidism and cardiac dysfunction In vitro studies Xenon-133 Bone mineral analyzers
Raymond C. Zastrow, M.D.	Groups I, II and III Iodine-131 for treatment of hyperthyroidism and cardiac dysfunction In vitro studies Xenon-133 Bone mineral analyzers
Joseph Teresi, M.D.	Groups I, II and III In vitro studies Xenon-133 Bone mineral analyzers
Douglas A. Reasa, M.D.	Groups I, II and III Iodine-131 for treatment of hyperthyroidism and cardiac dysfunction In vitro studies Xenon-133 Bone mineral analyzers

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George E. Farley, M.D.

Groups I, II and III
Iodine-131 for treatment of hyperthyroidism and cardiac dysfunction
Gold-198 as colloid for intracavitary treatment of malignant effusions
In vitro studies
Xenon-133
Bone mineral analyzers

20. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in application dated December 10, 1982; letter dated May 8, 1985; and Model ALARA Program as contained in Appendix O of Regulatory Guide 10.8, October 1980. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

Conditions 21., 22., and 23. are added:

21. A. Each sealed source containing licensed material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within five (5) days of the test with the U. S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.

D. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated May 8, 1985 for analysis by S.A. Huber Consultants, Inc. Alternatively, leak test samples may be collected and/or analyzed by other persons specifically authorized by the Commission or an Agreement State to perform such services.

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22. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.

23. The licensee shall follow the manufacturers' instructions and procedures for installation and replacement of source holders containing the sealed sources in each bone mineral analyzer.

For the U.S. Nuclear Regulatory Commission

Original Signed
By Evelyn R. Matson
Materials Licensing Section, Region III

Date July 2, 1985

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