OAKWOOD HOSPITAL CORPORATION

September 16, 1986

NRC Region III 799 Roosevelt Road Glen Ellyn, IL 60137

Gentlemen:

Please amend license number 21-04515-01 to include Gd-153 for dual-photon absorptiometry. We request a 3000 mCi possession limit (two sources-to cover source changing). Our authorized user (s) are as listed on our present License.

'86 SEP 22 A9.

RECE

Attached is the \$120.00 amendment fee.

Sincerely,

L W. FEE MOMT BRANCH

A. V. P. - Operations

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Check No. 850/01 \$120

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PROCEDURES AND PRECAUTIONS FOR THE USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b.

### 1. Device and Source Model Numbers

a. Device: Lunar model DP3

b. Source: Gd-153 sealed source

Lunar GD series or an NRC approved equivalent

Two sources have been requested to cover changes of sources.

### 2. Sealed Source Leak Tests

Leak tests at intervals not to exceed six (6) months will be performed capable of detecting the presence of 0.005 uCi of radioactive material on the test sample. The test sample will be taken from the sealed source or from the surface of the device in which the sealed source is permanently mounted or stored on which contamination might be expected to accumulate. Records of leak tests results will be kept in unit. Smicrocuries and maintained for inspection by the Commission. Medical Physics Consultants, Inc. of Ann Arbor, Michigan will perform the required tests.

## 3. Source Change

Sealed sources will be changed by this facility in accordance with the procedure manual provided with the unit (version 1 12-2-85). The individual responsible for the source exchange will be one of the authorized users. The Lunar Radiation Corporation will conduct a two-day training session to cover: installation and exchange of source, source leak testing, preparing decayed source for shipment, storage of source if it is not in the densitometer, and use of a survey meter.

# 4. Storage and Security

The unit will be used in a room exclusively for that purpose, properly locked and posted at all times. During off-duty hours a security system protects the building.

## 5. Personnel Monitoring

Whole-body and extremity monitors will be worn during source exchange.

### 6. Source disposal

The sealed sources that have decayed or that or no longer needed will be returned to the source manufacturer.

### 7. Servicing/Maintenance

Servicing and maintenance of the bone mineral analyzer involving the source holder and/or shutter mechanism will be performed by the manufacturer or by persons specifically authorized by the Nuclear Regulatory Commission.

Oakwood Hospital