NRC Form 374
(9-84)

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 33

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, 40 and 70, 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	In accordance with application dated August 7, 1985
1. Department of The Army	3. License number 42-05255-07 is amended in its entirety to read as follows:
2. William Beaumont Army Medical Center El Paso, Texas 79920	4. Expiration date February 28, 1988
	5. Docket or Reference No. 030-03260

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
A. Any byproduct material listed in Groups I and II of Schedule A, Section 35.100 of 10 CFR 35	A. Any radiopharmaceutical listed in Groups I and II of Schedule A, Section 35.100 of 10 CFR 35	A. As necessary for uses authorized in Subitem 9.A.
B. Any byproduct material listed in Group III of Schedule A, Section 35.100 of 10 CFR 35	B. Any form listed in Group III of Schedule A, Section 35.100 of 10 CFR 35	B. 5 curies of each byproduct material authorized in Subitem 6.B.
C. Any byproduct material listed in Group IV of Schedule A, Section 35.100 of 10 CFR 35	C. Any radiopharmaceutical listed in Group IV of Schedule A, Section 35.100 of 10 CFR 35	C. As necessary for uses authorized in Subitem 9.C.
D. Any byproduct material listed in Group V of Schedule A, Section 35.100 of 10 CFR 35	D. Any radiopharmaceutical listed in Group V of Schedule A, Section 35.100 of 10 CFR 35	D. As necessary for uses authorized in Subitem 9.D.
E. Any byproduct material listed in Group VI of Schedule A, Section 35.100 of 10 CFR 35	E. Any sealed source listed in Group VI of Schedule A, Section 35.100 of 10 CFR 35	E. 3 curies total for all sources authorized in Subitem 6.E.

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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number: 42-05255-07
Docket or Reference number: 030-03260
Amendment No. 33

F.	Xenon-133	F. Gas or gas in solution that is the subject of an active (i.e., not withdrawn or terminated) "New Drug Application" (NDA) approved by FDA or an active (i.e., not withdrawn, terminated or on "clinical hold") "Notice of Claimed Investigational Exemption for a New Drug" (IND) that has been accepted by FDA	F. 3 curies
G.	Gadolinium-153	G. Sealed sources (Lunar Radiation Corporation GD Series)	G. Not to exceed 1.5 curies per source
H.	Any byproduct material with Atomic Numbers 1-83 inclusive	H. Any	H. Not to exceed 100 millicuries per radionuclide
I.	Americium-241	I. Sealed sources	I. 50 millicuries

9. Authorized use

A. Any diagnostic procedure listed in Groups I and II of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.

B. Preparation and use of radiopharmaceuticals for any diagnostic procedure listed in Group III of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.

C. Any therapeutic procedure listed in Group IV of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.

D. Any therapeutic procedure listed in Group V of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
42-05255-07

Docket or Reference number
030-03260

Amendment No. 33

9. (con't)

E. Any procedure listed in Group VI of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations. Instrument calibration.

F. Blood flow or pulmonary function studies.

G. For use in Lunar Radiation Corporation Model Lunar DP3 dual photon spine/femur scanner for bone densitometry.

H. through I. Medical research, diagnosis and therapy. In vitro and lower animal research. Components of electronic analytical equipment and instrument calibration.

CONDITIONS

10. A. Except as authorized in paragraph 10.B, licensed material shall be used only at William Beaumont Army Medical Center (WBAMC), El Paso, Texas, and at facilities of Fort Bliss, including its Texas and New Mexico ranges, which are under the administrative control of WBAMC as a tenant organization.

B. WBAMC may provide bacteriologic blood screening using the C-14 based BACTEC System at any federal primary or secondary health care facility in Texas, New Mexico, and Arizona.

11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."

12. A. Licensed material shall be used by, or under the supervision of, individuals designated by the WBAMC Radioisotope/Radiation Control Committee.

B. Human use of radioactive drugs for basic research, as defined in Section 361.1 of 21 CFR Part 361, shall not be conducted unless approved by a Food and Drug Administration approved Radioactive Drug Research Committee under the provisions of 21 CFR Part 361.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
42-05255-07

Docket or Reference number
030-03260

Amendment No. 33

13. A. (1) Each sealed source acquired from another person and containing licensed material, other than hydrogen-3, with a half-life greater than 30 days and in any form other than gas shall be tested for contamination and/or leakage prior to use. In the absence of a certificate from a transferor indicating that a test has been made within 6 months prior to the transfer, a sealed source received from another person shall not be put into use until tested.

(2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

(3) Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within 6 months prior to the date of use or transfer.

B. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to use or transfer as a sealed source. If the inspection or test reveals any construction defects or 0.005 microcurie or greater of contamination, the source shall not be used or transferred as a sealed source until it has been repaired, decontaminated, and retested.

C. Each sealed source containing licensed material, other than hydrogen-3, with a half-life greater than 30 days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed 6 months except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed 3 months.

D. 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 or semipermanently 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.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
42-05255-07

Docket or Reference number
030-03260

Amendment No. 33

13. (continued)

E. If the test required by Subsection A. or C. of this condition 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 5 days of the test with the U. S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Dr., Suite 1000, Arlington, Texas 76011, describing the equipment involved, the test results, and the corrective action taken.

14. A. Detector cells containing titanium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 225 degrees Centigrade.

B. Detector cells containing scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 325 degrees Centigrade.

15. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in Section 20.203(a)(1), Title 10, Code of Federal Regulations, Part 20, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.

16. Patients containing iodine-131 for the treatment of thyroid carcinoma (or patients containing therapeutic quantities of gold-198) shall remain hospitalized until the residual activity is 30 millicuries or less.

17. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provide

A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.

B. Prior to disposal as normal waste, radioactive waste shall be monitored to determine that its radioactivity cannot be distinguished from background with typical low-level laboratory survey instruments. All radiation labels will be removed or obliterated.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
42-05255-07

Docket or Reference number
030-03260

Amendment No. 33

17. (continued)

C. Generator columns shall be segregated so that they may be monitored separately to ensure decay to background levels prior to disposal.

18. The licensee may use the Lineator device for doing linearity tests of his dose calibrator provided he follows the procedures in the Atomic Products Corporation Lineator Instructions Manual dated June 20, 1983.

19. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."

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 applications dated March 29, 1979, and August 7, 1985; and letters dated August 15, 1980 (ALARA), April 26, 1982, and December 9, 1982. 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.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date OCT 16 1985

By Original Signed By
Jack E. Whitten

Nuclear Materials Safety Section
Region IV
Arlington, Texas 76011

Official Record Copy

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