

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 1, Parts 30, 31, 32, 33, 34, 35, 36, 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); and to import such byproduct and source material. 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 July 18, 1979	
1. Department of the Army Walter Reed Army Medical Center (WRAMC) 2. Washington, D. C. 20012		3. License number 03-01738-02 is amended in its entirety to read as follows:	
		4. Expiration date July 31, 1987	
		5. Docket or Reference No.	
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 with Atomic Nos. 3-83, inclusive	A. Any	A. 400 millicuries of each except: Iodine 131 1 curie Xenon 133 1 curie Krypton 85 1 curie Gold 198 1 curie Phosphorus 32 2 curies Carbon 14 2 curies Iodine 125 1 curie Iridium 192 750 millicuries Total not to exceed 26 curies	
B. Hydrogen 3	B. Any	B. 5 curies	
C. Molybdenum 99	C. Molybdenum 99/ Technetium 99 Generators	C. 20 curies	
D. Technetium 99m	D. Any	D. 10 curies	
E. Iodine 125	E. Sealed Sources and Seeds	E. 1 curie	
F. Cesium 137	F.	F.	
G. Cesium 137	G.	G.	

Information in this record was deleted in accordance with the Freedom of Information Act, exemptions 2
FOIA 2006-0238

Ex 2

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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
03-01738-02
Docket or Reference number

Amendment No. 50

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
H. Cesium 137	H. Sealed Sources	H.
I. Cobalt 60	I. Sealed Sources	I.
J. Americium 241	J. Any	J. 100 microcuries
K. Americium 241	K.	K.
L. Americium 241	L. Any	L.
M. Polonium 210	M. Any	M. 15 millicuries
N. Nickel 63	N. Sealed Sources and foils	N. 1 curie
O. Uranium (Natural and/or Depleted)	O. Any	O. 400 kilograms
P. Thorium	P. Any	P. 5 kilograms

9. Authorized use

- A. through F. Medical research, diagnosis and therapy, including research and development as defined in 10 CFR 30.4(q) and human use as defined in 10 CFR 35.3(a).
- G. In an [] for calibration of instruments.
- H. Research and development as defined in 10 CFR 30.4(q) and instrument calibration.
- I. through K. Research and development as defined in 10 CFR 30.4(q).
- L. Standards and reference sources.
- M. and N. Research and development as defined in 10 CFR 30.4(q).
- O. and P. Teaching, laboratory research and shielding.

CONDITIONS

- 10. Licensed material shall be used only at Walter Reed Army Medical Center, Washington, D. C.; WRAMC Forest Glen Section and Annex, Silver Spring, Maryland; U.S. Army Medical Research Institute for Infectious Diseases, Fort Detrick, Frederick, Maryland; Andrew Bader Army Clinic, Fort Myer, Virginia; Walter Reed Army Institute of Research Animal Holding Facility, Fort Meade, Maryland; U.S. Army Medical Laboratory, WRAMC Department of Pathology, Fort Meade, Maryland; and U.S. Army Institute of Dental Research Facility, Fort Meade, Maryland.

Ex 2

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
08-01738-02
Docket or Reference number

Amendment No. 50

CONDITIONS

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. Licensed material shall be used by, or under the supervision of, individuals designated by WRAMC Radiation Control Committee.
13. A. (1) Each sealed source acquired from another person and 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 contamination and/or leakage prior to use. 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.
(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 six 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 thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed three months.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number
08-01738-02

Docket or Reference number

Amendment No. 50

CONDITIONS

13. continued

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.

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 five (5) days of the test with the U. S. Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement, 631 Park Avenue, King of Prussia, Pennsylvania 19406, describing the equipment involved, the test results, and the corrective action taken.

14. 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.

15. Patients containing Cobalt 60, Cesium 137 or Iridium 192 implants shall remain hospitalized until a source count and surveys made with an appropriate radiation detection instrument indicate that all implants have been removed. The results of these surveys shall be recorded and maintained for inspection by the Commission for five (5) years from the time the implants are removed.

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.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

08-01738-02

Docket or Reference number

Amendment No. 50

CONDITIONS

17. 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 of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."
18. 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 provided:
- A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of ten (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.
 - C. Generator columns shall be segregated so that they may be monitored separately to ensure decay to background levels prior to disposal.
19. 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 July 18, 1979; letter dated April 21, 1981 and ALARA Program. 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

WILLIAM J. WALKER, JR.

Material Licensing Branch

Division of Fuel Cycle and
Material Safety
Washington, D.C. 20555

Jul 16 1982

Date _____

By _____