

MATERIALS LICENSE

Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to 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 in all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any specified below.

Licensee		
University of Bridgeport	3. License number	SNM-1952
Bridgeport, Connecticut 06602	4. Expiration date	June 30, 1990
	5. Docket or Reference No.	070-03021
Product, source, and/or nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
Plutonium	A. Encapsulated as a Pu-Be neutron sources	A. 32 grams

Authorized use

For use in a neutron-howitzer for the teaching and training of students.

CONDITIONS

Licensed material shall be used only at the licensee's facilities, Room 40C, Dana Hall of Science, University Avenue, Bridgeport, Connecticut.

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."

Licensed material shall be used by, or under the supervision of, Dr. James V. Tucci or Dr. Alice Y.N.L. Chance.

Sealed sources containing licensed material shall not be opened.

- (1) 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. 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.

8130306 850710
1 LIC70
-1952

PDR

"OFFICIAL RECORD COPY"

ML10

MATERIALS LICENSE
SUPPLEMENTARY SHEET

PAGE 2 OF 2 PAGES
License number
SNM-1952
Docket or Reference number
070-03021

(14. continued)

CONDITIONS

- (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. 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 5 days of the test with the U. S. Nuclear Regulatory Commission, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
15. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the design of which the NRC has specifically approved for transport of plutonium by air.
16. 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 letter dated March 26, 1980, and letter dated May 21, 1985. 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

JUL 10 1985

By

Original Signed By:
Jack Davis

Nuclear Materials Safety and
Safeguards Branch, Region I
King of Prussia, Pennsylvania 19406