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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		3. License number	SNM-291
1. Western Michigan University Kalamazoo, Michigan 49008		4. Expiration date	May 31, 1986
2.		5. Docket or Reference No.	70-309
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	
Plutonium	a. Encapsulated Pu-Be b. Plated c. Plated	a. Eighty grams b. Nine micrograms including no more than seven micrograms of Pu-238 c. Two one-hundredth (0.02) microcuries	

9. Authorized Use:

For use in accordance with statements, representations and conditions specified in the licensee's application dated March 19, 1962 and supplements dated April 24, 1962, April 19 and May 14, 1965, April 2 and December 16, 1968; March 21, 1973, March 31, 1978, and April 7, 1981.

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MATERIALS LICENSE

Supplementary Sheet

License Number SNM-291

Docket or  
Reference No. 70-309

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10. Location of Use: Western Michigan University  
Kalamazoo, Michigan 49008

Condition 11. The licensee shall comply with Annex A, "License Condition for Leak Testing Sealed Plutonium Sources," dated September 1980.

Condition 12. Release of equipment or materials from WMU for unrestricted use shall be in accordance with the enclosed Annex B, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use of Termination of Licenses for Byproduct, Source, or Special Nuclear Material," published by the U.S. NRC Division of Fuel Cycle and Material Safety, dated November 1976.

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For the U. S. Nuclear Regulatory Commission

Date May 14, 1981

by Ralph G. Page  
Division of Fuel Cycle and  
Material Safety  
Washington, D.C. 20555

LICENSE CONDITION FOR LEAK TESTING

SEALED PLUTONIUM SOURCES

- A. Each plutonium source shall be tested for leakage at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcuries of alpha contamination on the test sample. The test sample shall be taken from the source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. 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 alpha contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired by a person appropriately licensed to make such repairs or to be disposed of in accordance with the Commission regulations. Within five (5) days after determining that any source has leaked, the licensee shall file a report with the Division of Fuel Cycle and Material Safety, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, describing the source, the test results, the extent of contamination, the apparent or suspected cause of source failure, and the corrective action taken. A copy of the report shall be sent to the Director of the nearest NRC Inspection and Enforcement Office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. 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 (6) months prior to the date of use or transfer.

U.S. Nuclear Regulatory Commission  
Division of Fuel Cycle and Material  
Safety  
Washington, D.C. 20555

September 1980