

## MATERIALS LICENSE

Amendment No. 01

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); 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

1. Paytheon Company  
The Machlett Laboratories, Inc.  
70 Ryan Street  
2. Stamford, Connecticut 06907

In accordance with letter dated  
August 22, 1983

3. License number 06-18105-01 is amended in  
its entirety to read as follows:

4. Expiration date October 31, 1988

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. Iodine 131

A. Any

A. Not to exceed 5  
millicuries total

B. Technetium 99m

B. Any

B. Not to exceed 25  
millicuries total

C. Barium 133

C. Any

C. Not to exceed 0.5  
millicuries total

D. Cerium 141

D. Any

D. Not to exceed 10  
millicuries total

9. Authorized use

A. through D. For use in testing and calibration of analytical instruments.

## CONDITIONS

10. Licensed material shall be used only at the licensee's facility at 70 Ryan Street, Stamford, Connecticut.
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, Michael R. Gambini or William H. Devins.

8506200278 850524  
REG1 LIC30  
06-18105-01 PDR

"OFFICIAL RECORD COPY"

ML10

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License number  
06-18105-01

Docket or Reference number

Amendment No. 01

CONDITIONS

13. A. (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. 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) 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 five (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. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated August 1, 1978 for analysis by Interex Corporation. Alternatively, leak test samples may be collected and/or analyzed by other persons specifically authorized by the Commission or an Agreement State to perform such services.

"OFFICIAL RECORD COPY" ML10

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License number

06-18105-01

Docket or Reference number

Amendment No. 01

CONDITIONS

14. Sealed sources containing licensed material shall not be opened.
15. Licensed material shall not be used in or on human beings or in products distributed to the public.
16. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of sealed sources and the date of the inventory.
17. 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 March 20, 1978; and letters dated August 1, 1978 and August 22, 1983. 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.

Date NOV 04 1983

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Original signed by

By DONNA-BETH HOWE, Ph.D.

Region I

Nuclear Materials and Safeguards Branch  
King of Prussia, Pennsylvania 19406

"OFFICIAL RECORD COPY"



## MATERIALS LICENSE

Amendment No. 01

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); 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

1. Raytheon Company  
The Machlett Laboratories, Inc.  
70 Ryan Street  
2. Stamford, Connecticut 06907

In accordance with letter dated  
August 22, 1983

3. License number 06-18105-01 is amended in  
its entirety to read as follows:

4. Expiration date October 31, 1988

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. Iodine 131

- A. Any

- A. Not to exceed 5  
millicuries total

- B. Technetium 99m

- B. Any

- B. Not to exceed 25  
millicuries total

- C. Barium 133

- C. Any

- C. Not to exceed 0.5  
millicuries total

- D. Cerium 141

- D. Any

- D. Not to exceed 10  
millicuries total

9. Authorized use

- A. through D. For use in testing and calibration of analytical instruments.

## CONDITIONS

10. Licensed material shall be used only at the licensee's facility at 70 Ryan Street, Stamford, Connecticut.
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, Michael R. Gambini or William H. Nevins.

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License number

06-18105-01

Docket or Reference number

Amendment No. 01

## CONDITIONS

13. A. (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. 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) 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 five (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. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated August 1, 1978 for analysis by Interex Corporation. Alternatively, leak test samples may be collected and/or analyzed by other persons specifically authorized by the Commission or an Agreement State to perform such services.

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License number

06-18105-01

Docket or Reference number

Amendment No. 01

## CONDITIONS

14. Sealed sources containing licensed material shall not be opened.
15. Licensed material shall not be used in or on human beings or in products distributed to the public.
16. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of sealed sources and the date of the inventory.
17. 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 March 20, 1978; and letters dated August 1, 1978 and August 22, 1983. 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 NOV 04 1983By Dr. Donna-Beth Howe

Region I

Nuclear Materials and Safeguards Branch  
King of Prussia, Pennsylvania 19406