S. ATOMIC ENERGY COMMISSION
BYPRODUCT MATERIAL LICEN

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Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 30, Licensing of Byproduct Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer and import byproduct material listed below, and to use such byproduct material for the purpose(s) and at the place(s) designated below. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

Licensee

- 1. Name Department of the Army Walter Reed Army Medical Center
- 2. Address Division of Nuclear Medicine
 Department of Radiobiology
 Washington, D. C.

In accordance with application dated April 12, 1965,

3. License number 1738-3 is amended in its entirety to read as follows:

4. Expiration date

August 31, 1970

5. Reference No.

- 6. Byproduct material (element and mass number)
- A. Cobalt 60
- B. Cobalt 60

- 7. Chemical and/or physical form
- A. AECL Sealed Sources
- B. Sealed Sources (Encapsulated per Budd Co. Dwg. D-50413)
- Maximum amount of radioactivity which licensee may possess at any one time
- A. 1500 curies B. 1500 curies

- 9. Authorized use
- A. To be used in AECL Gammacell 220 irradiator for research and development in radiation biology and radiation dosimetry.
- B. To be used in a small animal irradiator (per Budd Co. Dwg. T-70025) for research and development in radiation biology and radiation dosimetry.

CONDITIONS

- 10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above:
- 11. The licensee shall comply with the provisions of Title 10, Part 20, Code of Federal Regulations, Chapter 1, "Standards for Protection Against Radiation."
- 12. Byproduct material shall be used by, or under the supervision of, individuals designated by the Isotope Committee, Commanding General, Walter Reed Army Medical Center, Chairman.
- 13. A. Each sealed source containing byproduct material shall be tested for leakage and/or contamination at intervals not to exceed 6 months. In the absence of a certificate from a transferor indicating that a test has been made within 6 months prior to the transfer, the sealed source shall not be used until tested.

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Supplementary Sheet

License Number 8-1738-3

(H70)

13. B. The tests shall be capable of detecting the presence of 0.05 microcurie of contamination on the test sample. The test sample shall be taken 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 0.05 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 days of the test with the Director, Division of Materials Licensing, U. S. Atomic Energy Commission, Washington, D. C., 20545, describing the equipment involved, the test results, and the corrective action taken. A copy of such report shall be sent to the Director, Region I, Division of Compliance, USAEC, 376 Hudson Street, New York, New York, 10014.
- D. Tests for leakage and/or contamination shall be performed by, or under the supervision of, individuals designated by the Isotope Committee, Commanding General, Walter Reed Army Medical Center, Chairman.
- 14. Written administrative instructions entitled, "Operation and Safety Procedures to be Followed for AECL Gammacell 220 Irradiator," and "Operation and Safety Procedures to be followed for Small Animal Irradiator," both dated March 25, 1965, shall be followed and a copy of these instructions shall be made available to each individual using or having responsibility for use of byproduct material. Any changes in these instructions shall have the prior approval of the Isotopes Branch, Division of Materials Licensing.
- 15. The licensee is authorized to remove two (2) sealed sources from the small animal irradiator to facilitate repair to the irradiator. This operation may be repeated with two (2) other sealed sources of the irradiator when the two (2) preceding sources have been safely returned to the small animal irradiator. Source removal and replacement shall be in accordance with statements, representations, and procedures contained in the enclosures with the letter dated August 28, 1963, signed by W. V. Davis, letter dated November 22, 1963, signed by W. V. Davis.

For the U.S. Atomic Energy Commission

Original Signed by

Isotopes Branch

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Date JUN 1 5 1965

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Division of Materials Licensing Washington, D. C. 20545