

**U. S. ATOMIC ENERGY COMMISSION
BYPRODUCT MATERIAL LICENSE**

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.

<p>Licensee</p>		<p>3. License number 8-1738-3 (H65)</p>
<p>1. Name Department of the Army Walter Reed Army Medical Center</p>	<p>4. Expiration date August 31, 1965</p>	
<p>2. Address Division of Nuclear Medicine and Chemistry Department of Radiobiology Washington, D.C.</p>	<p>5. Reference No.</p>	
<p>6. Byproduct material (element and mass number)</p> <p>A. Cobalt 60</p>	<p>7. Chemical and/or physical form</p> <p>A. Atomic Energy of Canada Limited Sealed Sources.</p>	<p>8. Maximum amount of radioactivity which licensee may possess at any one time</p> <p>A. 1500 curies</p>

9. Authorized use

A. For use in Atomic Energy of Canada Limited Gammacell 220 Irradiator.

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 ^{direct} supervision of, persons designated by the ~~Walter Reed Army Medical Center~~, Colonel Richard P. Mason, Chairman.
13. Byproduct material as sealed sources shall not be opened.
14. Sealed sources shall be tested for leakage and/or contamination in accordance with the following:
 - A. Leak test shall be performed in accordance with procedures in document entitled, "Operation and Leak Testing Procedures Followed for Gammacell 220", submitted with letter dated July 27, 1960 signed by Colonel Arthur P. Long.

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Supplementary Sheet

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CONTINUED:

CONDITIONS

- B. Each sealed source containing byproduct material with a half-life greater than thirty (30) days and in any form other than gas, shall be tested for leakage and/or contamination as follows:
- (1) An appropriate test for leakage and/or contamination shall be performed on the sealed source surface, or on the accessible surfaces of the device in which such a sealed source is permanently or semipermanently mounted. The test shall be performed upon receipt of a source from another person, unless the licensee receives certification from the person making the transfer that the sealed source had been tested within thirty (30) days prior to transfer and found free of any removable radioactive material.
 - (2) Following completion of the test prescribed in B(1), each sealed source shall be tested for leakage and/or contamination at intervals not to exceed six (6) months.
- C. The test performed pursuant to B shall be sufficiently sensitive to detect 0.05 microcurie of removable beta and/or gamma emitting radioactive material. Records of leak test results shall be maintained by the licensee.
- D. If the test performed pursuant to B(1) or B(2) reveals removable radioactive material, the licensee shall take immediate action to prevent spread of contamination and, within thirty (30) days after completion of the test, shall notify the Isotopes Branch, Division of Licensing and Regulation, U.S. Atomic Energy Commission, Washington 25, D.C.
- E. Repair of sources shall be performed by the manufacturers of the sources or by persons specifically licensed by the Commission to perform such repairs.
15. Except as otherwise specifically provided for in the license, the licensee shall possess and use byproduct material described in Items 6, 7 and 8 of this license in accordance with statements, representations, and procedures contained in his application dated June 22, 1960, and in related documents and amendments as follows:
- A. "Atomic Energy of Canada Limited Operation and Maintenance Manual Gammacell 220", dated June 15, 1960.
 - B. "Safety Instruction for Gammacell 220", submitted with application dated June 22, 1960.
 - C. "Operation and Leak Testing Procedures Followed for Gammacell 220", submitted with letter dated July 27, 1960 signed by Colonel Arthur P. Long.

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U. S. ATOMIC ENERGY COMMISSION
HYPRODUCT MATERIAL LICENS

Supplementary Sheet

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CONTINUED:

CONDITIONS

16. Written administrative instructions referenced in Condition 15A, 15B, and 15C covering radiological protection, control, and security of byproduct material shall be followed and a copy of instructions shall be supplied to each individual using or having responsibility for use of such material. Any changes in the administrative instructions shall have the prior approval of the Isotopes Branch, Division of Licensing and Regulation.

DUPLICATED
FOR DIV. OF INSP.

Date August 4, 1960

For the U. S. Atomic Energy Commission

by [Signature] Chief, Isotopes Branch

Division of Licensing and Regulation
Washington 25, D. C.

[Signature]

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