FORM AEC-374 (12-57)

U. S. ATOMIC ENERGY COMMISSION SYPRODUCT MATERIAL LICENS

Page 1 of **2** Pages

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	Union Carbide Corporation Carbon Products Division		3. License number 41-10185-1 (H66)	
2. Address Lawrenceburg, Tennessee 38464		4. Expiration date August 31, 1966		
			5. Reference 1	No.
6. Byproduct material (element and mass number)		7. Chemical and/or physical form		8. Maximum amount of radioactivity which licensee may possess at any one time
A. Cobalt 60		A. Sealed sour Chicago Cor Model RR-61	-	A. 25 millicuries

9. Authorized use

A. Instrument calibration.

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, Hoyer B. Edwards, or Francis P. Green.
- 13. Sealed sources containing byproduct material shall not be opened.

14. A. Each sealed source containing byproduct 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 be within six months prior to the transfer, the sealed source shall not be to use until tested.

(see page two)

FORM AE: #7

U. S. ATOMIC ENERGY COMMISSION 3YPRODUCT MATERIAL LICEN'

Page_2_of_2_Pages

Supplementary Sheet

License Number **\$1-10185-1** (R66)

CONDITIONS

- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive meterial 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 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 also be sent to the Director, Region II, Division of Compliance, USAEC, 50 Seventh Street, Northeast, Atlanta, Georgia, 30323.
- D. Tests for leakage and/or contamination shall be performed by the licensee as described in letter dated August 12, 1964, from W. P. Estherly, or by other persons specifically authorized by the Commission or by an Agreement State to perform such services.
- 15. Except as specifically provided otherwise by this 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 application dated July 9, 1964.

For the U.S. Atomic Energy Commission

Driginal Signed by Isotopes Branch Rebert E. Brinkman by <u>Division of Materials. Licensing</u> Washington 25. B. B.

RER S/E0/64

AUG 2 0 1964

Date

· Bill mak "