

U. S. ATOMIC ENERGY COMMISSION
BYPRODUCT MATERIAL LICENSE

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Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Parts 30, 32, 33, 34, and 35, 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, as amended, 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. Combustion Engineering, Inc.		3. License number 24-16206-01
2. Route 21-A Hematite, Missouri 63047		4. Expiration date August 31, 1979
		5. Reference No. 24-12988-01
6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radioac- tivity which licensee may possess at any one time
A. Cobalt 60	A. Sealed source (Tracerlab Model R-31)	A. 10 millicuries
B. Cobalt 60	B. Sealed source	B. 30 millicuries
C. Californium 252	C. Sealed source	C. 13.5 millicuries
9. Authorized use		
A. and B. Testing and calibration of instruments.		
C. To be used in a custom designed, shielded device for activation analysis.		

CONDITIONS

10. Byproduct material shall be used only at the licensee's facilities at Route 201A, Hematite, Missouri.
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. Byproduct material shall be used by, or under the supervision of, R. E. Bilbrey or L. Swallow.
13. Sealed sources containing byproduct material shall not be opened.



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CONDITIONS

(Continued)

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 been made within six 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 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 5 days of the test with the USAEC, Region III, Directorate of Regulatory Operations, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or 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 received July 15, 1974.

AUG 16 1974

Date _____

For the U. S. Atomic Energy Commission

Original signed by
DOUGLAS E. [unclear]

Materials Branch

by _____ 10 MC 8/15/74

Directorate of Licensing
Washington, D. C. 20545