FORM AEC-374

## U. S. ATOMIC ENERGY COMMISSU N BY DUCT 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 Aluminum Company of America Aluminum Research Laboratories				3. License number 37-7653-2060	
2.	2. Address <b>Presport Road</b> New Kensington, Punnsylvanis		4. Expiration	date	
			Apr11 30, 1960 5. Reference No. 37-7653-1		
					-
6	<ul> <li>Byproduct material (element and mass number)</li> </ul>				7. Chemical and/or physical form A. Any B. Any
	A. Hydrogen 3 B. Strontium 90		A. 25 curies B. 10 millicuries		
	(See page 2)		(See page 2)		(See page 2)
9.	Authorized	d use			

## A, B, C, and D: HESEARCH AND DEVELOPMENT as defined in Section 11(q) of the Atomic Energy Act of 1954.

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, Cede of Federal Regulations, Part 20, Chapter 1, "Standards for Protection Against Rediction".
- 12. Byproduct material shall be used by, or under the supervision of, individuals approved by the local isotope committee, John E. Lewis, Chairman.
- 13. THIS LICENSE SUPERSEDES LICENSE NO. 37-7653-1 ISSUED FEBRUARY 29, 1956.
- 14. Sealed sources fabricated or acquired under this license shall be tested for contanination. Sealed sources containing byproduct material (except solid metal Iridium 192; Tantalum 182, Cobalt 60 plated with gold or nickel; and gases) shall be tested for leakage at intervals of not more than six (6) months and records of leak test results shall be maintained by the licenses.
- 15. Total amount of Hydrogen 3 (tritium) acquired under this license shall not exceed 50 curies.

	For the U.S. Atomic Energy Commission
Date April 18, 1958	by Drights Signer James R. Mason by Chief, Tsotopes Branck
Cje V	Division of Licensing and Regulatio Washington 25, D. C.

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DUCT MATERIAL LICENS

Supplementary Sheet

License Number 37-7653-2060

6.	Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radio- activity which licensee may possess at any one time
	C. Strontium 90	C. Sealed Source (Tracerlab, In Model No. S-2A	
	D. Any Byproduct Material between Atomic Nos. 3 and 83, inclusive, except Strontium 90	D. Any	D. 2 curies each of any byproduct material between Atomic Nos. 3 and 83, inclusive, except Stron- tium 90. Total possession limit, 10 curies

## CONDITIONS

- 16. Written administrative instructions ("Radiation Protection Procedures, Alcoa Research Laboratories" dated March 14, 1958) covering radiological protection, control, and security of byproduct material shall be supplied to each individual using or having responsibility for use of such material.
- 17. Fach sealed source of licensed material to be used outside of a shielded exposure device shall be acquired from the supplier with a durable, legible, and visible tag permanently attached. The tag shall be attached directly to the source or attached by a durable chain or leader. The tag shall be at least one inch square, shall bear a conventional radiation symbol, and a minimum of the following instructions: "Danger -Radioactive Material, Do Not Handle, Notify Civil Authorities if Found". Repair or replacement of tags shall be accomplished by returning the source to the manufacturer.
- 18. Byproduct material shall not be used in or on human beings; in products distributed to the public; or in field applications where activity is released.

For the U.S. Atomic Energy Commission

	Ariginal Signed By Names R. Masc		
by	Chief, Isotopes Branch		
	Division of Licensing and Regulation Washington 25, D. C.		

Date April 18, 1958

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