

U. S. ATOMIC ENERGY COMMISSION  
BYPRODUCT MATERIAL LICENSE

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E No. 29-4459-1  
(66) AMENDMENT NO. 10

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		In accordance with application dated September 24, 1965, 29-4459-1 is amended in its entirety to read as follows:	
1. Name	Signalite, Incorporated	3. License number	
2. Address	1933 Hack Avenue Neptune, New Jersey	4. Expiration date	April 30, 1967
		5. Reference 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. Krypton 85	A. Gas	A. 4 curies	
B. Nickel 63	B. Any	B. 300 millicuries	
(see page 2)	(see page 2)	(see page 2)	
9. Authorized use			
A., B., and D. To be used for research, development, and manufacture of sealed spark gap and electronic tubes. Tubes containing not more than 5 microcuries of Krypton 85 or Cesium 137 or 0.2 microcuries of Nickel 63 per tube may be distributed to persons licensed pursuant to Section 31.3(b), 10 CFR 31. (see page 2)			

CONDITIONS

10. Unless otherwise specified, the authorized place of use in 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, John Cowley, Michael Behary, Nelson Palmer, Edward Bauman, John Johnston, Keith W. Olson, Peter A. Odde, and Harry Parker.
13. The distribution of tubes, containing byproduct material as generally licensed items pursuant to Section 31.3(b), 10 CFR 31, shall be subject to the following conditions:
  - A. Each tube, tube package, or an accompanying packing slip with each tube shall contain a statement of the radioisotope present, amount in microcuries per tube, and authority for distribution to persons generally licensed pursuant to Section 31.3(b), 10 CFR 31.

(see page 2)

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## MATERIAL LICENSE

Supplementary Sheet

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(D67)

Amendment Number 10

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|--|---|--|
| 6. Byproduct material<br>(element and mass number) | 7. Chemical and/or physical form                    | 8. Maximum amount of radioactivity which<br>licensee may possess at any one time |
| C. Americium 241                                   | C. Foil (U. S. Radium Type<br>LAB 204-1A)           | C. 250 microcuries   |
| D. Cesium 137                                      | D. Any  | D. 400 millicuries   |
| E. Cesium 137                                      | E. Sealed sources<br>(Fabricated by Tracer-<br>lab) | E. 200 microcuries   |

## 9. Authorized Use

- C. Laboratory studies of ionization sources in neon glow lamps.  
E. Calibration of instruments.

## CONDITIONS

13. B. Each tube, or tube package, containing in excess of a total of 0.1 microcurie of Krypton 85 or 1 microcurie of Nickel 63 or Cesium 137 shall exhibit a label containing the radiation symbol and the words, "CAUTION (OR DANGER) RADIOACTIVE MATERIALS."
14. 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 his applications dated November 12, 1958, October 26, 1960, October 10, 1962, March 17, 1965, and September 24, 1965, and in his letters dated August 28, 1960 and March 31, 1959, from Herman Altschule.

For the U. S. Atomic Energy Commission

Date

WEN

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by Isotopes BranchOriginal Signed by  
Robert E. BrinkmanDivision of Licensing and Regulation  
Washington 25, D. C.

REC 10/1/65