

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.

Licensee		
1. Name	National Lead Company	3. License number
2. Address	1050 State Street Forth Amboy, New Jersey	29-6033-1 (L61)
		4. Expiration date
		December 31, 1961
		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. Cobalt 60	A. Technical Operations Model A-424 Sealed Sources.	A. 52 curies contained in one source of 50 curies and one source of 2 curies.
9. Authorized use		
A. For use in Technical Operations Model 446 projector for industrial radiography.		

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 personal supervision of, G. L. Stukenbroeker or J. M. Nees.
13. Byproduct material as sealed sources shall not be opened.
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 application dated December 10, 1959, and in related documents and amendments as follows:
- A. "Radiation Protection Procedures", contained in application dated December 10, 1959.

(See page 2)

DUPLICATE

A/2

U. S. ATOMIC ENERGY COMMISSION
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Supplementary Sheet

License Number 29-6033-1
(161)

CONTINUED:

CONDITIONS

15. Written administrative instructions referenced in Condition 14A 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.
16. Calibrated and operable survey instrumentation is to be maintained at each site where radiographic exposures are being made. A physical radiation survey is to be made (1) to determine compliance with Sections 20.102 and 20.203 of Title 10, Code of Federal Regulations, Part 20, "Standards for Protection Against Radiation" and (2) immediately after each radiographic exposure is completed to determine that the source has been returned to its storage condition. The survey instrumentation shall have a range of a few milliroentgens per hour to at least one (1) roentgen per hour.
17. The radiographic areas are to be kept under continuous surveillance during each exposure operation.
18. The licensee shall exercise appropriate administrative control to assure that no person will use or personally supervise the use of byproduct material until such person has:
- A. Received instructions in, and demonstrated a thorough understanding of, the regulations of 10-CFR, Part 20, the licensee's operating and emergency procedures; and the provisions of this license.
 - B. Demonstrated competency in the use of byproduct material, equipment, and survey instruments which will be used.
19. Radiography exposure devices, portable carrying containers, shipping containers, and storage containers having a radius greater than four (4) inches shall be limited to maximum radiation levels of 200 mr/hr at the surface and 10 mr/hr at one meter from the source. Devices and containers having a radius of less than four (4) inches shall be limited to maximum radiation levels of 40 mr/hr at six (6) inches from the surface.

RECALLED
FOR DIV. OF INSP.

For the U. S. Atomic Energy Commission

Original Signed By
James R. MasonDate December 30, 1959WFM
12/31/59by Chief, Isotopes Branch
Division of Licensing and Regulation
Washington 25, D. C.

1. J.H. MB