

# ATOMIC ENERGY COMMISSION BYPRODUCT MATERIAL LICENSE

Page 1 of **2** Page

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	Shell Oil Company Morse Refinery	3. License number	17-6751-1 (162)
2. Address	Morse, Louisiana	4. Expiration date	September 30, 1962
		5. Reference No.	
6. Byproduct material (element and mass number)	7. Chemical and/or physical form		
A. Strontium-90	A. Sealed sources (U. S. Radium Corporation Model LAB-245)		
8. Maximum amount of radioactivity which licensee may possess at any one time	A. 70 millicuries (2 sources of 35 millicuries each)		
9. Authorized use	A. To be used as components of a device for measuring fluid density in the laboratory.		

## 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 supervision of,  
C. A. Caillat.
13. Byproduct material as sealed sources shall not be opened by the licensee.
14. 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 July 12, 1960, and in his letter from H. M. Kiefer dated August 29, 1960.

See page 2)

DUPLICATED

FOR DIV. OF INSP



A14

U. S. ATOMIC ENERGY COMMISSION  
BYPRODUCT MATERIAL LICENSES

Supplementary Sheet

Continued from page 1

License Number 17-6751-1  
(162)**CONDITIONS**

15. Each sealed source containing Strontium 90 shall be tested for leakage and/or contamination in accordance with the following:

- A. An appropriate test for leakage and/or contamination shall be performed on the sealed source surface, or on the accessible surfaces of the device in which such a sealed source is permanently or semipermanently mounted. The test shall be performed upon receipt of a source from another person, unless the licensee receives certification from the person making the transfer that the sealed source had been tested within thirty (30) days prior to transfer and found free of any removable radioactive material.
- B. Following completion of the test prescribed in A, each sealed source shall be tested for leakage and/or contamination at intervals not to exceed six (6) months.
- C. The test performed pursuant to A or B shall be sufficiently sensitive to detect 0.05 microcurie of removable beta and/or gamma emitting radioactive material. Records of leak test results shall be maintained by the licensee.
- D. If the test performed pursuant to A or B reveals removable radioactive material, the licensee shall take immediate action to prevent spread of contamination and shall notify the Isotopes Branch, Division of Licensing and Regulation, U. S. Atomic Energy Commission, Washington 25, D. C., within thirty (30) days after completion of the test.
- E. Repair of sources shall be performed by the manufacturers of the sources or by persons specifically licensed by the Commission to perform such repairs.
- F. Tests for leakage and/or contamination shall be performed by the licensee, as described in application dated July 12, 1960, or by other persons specifically licensed by the Commission to perform such tests.

September 7, 1960

Date

For the U. S. Atomic Energy Commission

Original Signed By

James R. Mason  
Chief, Isotopes Branch

by

Division of Licensing and Regulation  
Washington 25, D. C.

REB 9/8/60