

U. S. ATOMIC ENERGY COMMISSION
BYPRODUCT MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter I, Part 20, Regulations for the 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	Monsanto Chemical Company	3. License number
2. Address	800 J. Lindbergh Boulevard St. Louis 66, Missouri	24-1112-15 (1965)
		4. Expiration date
		April 30, 1965
		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. Cesium 137	A. Sealed Source (Nuclear- Chicago Model AS-138)	. One source not to exceed 500 millicuries.
9. Authorized use		
A. To be used in Nuclear-Chicago Model 506 Gauge for continuous density measurements.		

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 I, "Standards for Protection Against Radiation".
12. Byproduct material shall be used by, or under the supervision of, R. J. McManis or L. C. Weger.
13. The licensee shall not open or remove sealed sources containing byproduct material from their respective source holders.
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 six months prior to the transfer, the sealed source shall not be put into use until tested.

(See Page 2)

A/344

BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

Continued From Page 1License Number 24-1113-15
(D65)

- 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 five days of the test with the Director, Division of Licensing and Regulation, U. S. Atomic Energy Commission, Washington 25, D. C., describing the equipment involved, the test results and the corrective action taken. A copy of such report shall also be sent to the Director, Region III, Division of Compliance, USAEC, Oakbrook Professional Building, Oak Brook, Illinois.
15. Installation, relocation, maintenance, repair and initial radiation survey of devices containing byproduct material and leak testing, installation, replacement and disposal of sealed sources containing byproduct material used in devices shall be performed only by Nuclear-Chicago Corporation or by other persons specifically authorized by the Commission to perform such services.
16. 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 dated April 15, 1963.

For the U. S. Atomic Energy Commission

Original Signed by
Robert E. BrinkmanDate APR 29 1963DUPLICATED
FOR DIV. OF COMPLIANCEDivision of Licensing and Regulation
Washington 25, D. C.

1. Brinkman 1 letter

REB 4/29/63