

## MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

## Licensee

1. Ford Motor Company  
Radiological Health Office

3. License number 21-04114-29

2. 15000 Century Drive, Room 104  
Dearborn, MI 48121

4. Expiration date July 31, 1990

5. Docket or  
Reference No. 030-28697

6. Byproduct, source, and/or  
special nuclear material

7. Chemical and/or physical  
form

8. Maximum amount that licensee  
may possess at any one time  
under this license

A. Americium-241

A. Sealed source  
(Amersham Corp. Model  
13145 contained in a  
Princeton Gammatech Model  
100 chemical analyzer)

A. One source not  
to exceed 30  
millicuries

## 9. Authorized Use

A. To be used in a feasibility study to determine the practical application of an x-ray fluorescence analyzer on a paint assembly line to determine paint thickness.

## CONDITIONS

10. Licensed material may be used and stored at the licensee's facilities located at Ford Motor Company's Radiological Health Office, 1500 Century Drive, Dearborn, Michigan or at temporary job sites of the licensee at Ford Motor Assembly Plants throughout the United States where the U. S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
12. A. Licensed material shall be used by, or under the supervision of, Don Greschaw or D.S. Carruthers.
- B. At least one individual named in Condition No. 12.A. shall be physically present at the authorized place of use whenever licensed material is being used.
13. A. (1) Each sealed source containing licensed 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 within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.

8512060134 850628  
REG3 LIC30  
21-4114-29

PDR

11 MAY 30 1991 JUN 28 1991  
COPY 2

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License number

21-04114-29

Docket or Reference number

030-28697

(2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

- 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 (5) days of the test with the U. S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.

14. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.
15. The licensee shall not use licensed material in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.
16. Maintenance or repair of portable devices involving removal of the sealed sources from the devices or removal or dismantling of shielding may be performed by the licensee, the device manufacturer, or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
17. When performing tests at temporary job sites, the authorized user shall not leave the x-ray fluorescence analyzer unattended. Upon completion of tests the device shall be locked in a secure area to prevent unauthorized use, loss or theft.
18. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License number

21-04114-29

Docket or Reference number

030-28697

19. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in application dated April 22, 1985. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.



For the U.S. Nuclear Regulatory Commission

Original Signed

By George M. McCann

Materials Licensing Section, Region III

Date June 28, 1985

COPY