

MATERIALS LICENSE

Amendment No. 20

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. Hercules, Inc.
2. Highway 79
Louisiana, MO 63353

In accordance with application dated
January 15, 1985

3. License number 24-03060-01 is amended in
its entirety to read as follows:

4. Expiration date August 31, 1990

5. Docket or
Reference No. 030-05086

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

A. Cesium-137

B. Cesium-137

C. Cesium-137

D. Cesium-137

E. Cesium-137

7. Chemical and/or physical
form

A. Sealed source
(Ohmart Corp. Model
No. A-5771)

B. Sealed source
(Ohmart Corp. Model
No. A-2102)

C. Sealed source
(Ohmart Corp. Model
No. A-2102)

D. Sealed source
(Ohmart Corp. Model
No. A-2102)

E. Sealed source
(Ohmart Corp. Model
No. A-2102)

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

A. No single source
to exceed 100
millicuries

B. No single source
to exceed 300
millicuries

C. No single source
to exceed 100
millicuries

D. No single source
to exceed 50
millicuries

E. No single source
to exceed 20
millicuries

9. Authorized Use

- A. To be used in Ohmart Corporation Model SHRM-4 source holder for level measurement.
- B. To be used in Ohmart Corporation Model ED-12 source holder for density measurement.
- C. To be used in Ohmart Corporation Model SHRM-PA source holder for level measurement.
- D. To be used in Ohmart Corporation Model SHLG-1 source holder for level measurement.
- E. To be used in Ohmart Corporation Model SHCS-2 source holder for level measurement.

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MATERIALS' LICENSE
SUPPLEMENTARY SHEET

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CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at Highway 79 and County D, Louisiana, Missouri.
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. Licensed material shall be used by, or under the supervision of, William L. LaRue.
13. A. (1) Each sealed source shall be tested for leakage and/or contamination at intervals not to exceed three years. 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.

(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. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated May 14, 1979 for analysis by Ohmart Corporation. Alternatively, leak test samples may be collected and/or analyzed 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.

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15. Installation, relocation, and initial radiation survey of devices containing licensed material shall be performed only by the licensee in accordance with letter dated May 14, 1979, by the device manufacturer, or by other persons specifically authorized by the Commission or an Agreement State to perform such services. Maintenance and repair of devices, and installation, replacement, and disposal of sealed sources containing licensed material used in devices shall be performed only by the device manufacturer or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
16. 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."
17. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of sealed sources and the date of the inventory.
18. 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 January 15, 1985 and letter dated May 14, 1979. 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 William J. Adam, Ph.D.

Materials Licensing Section, Region III

Date August 2, 1985

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