NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 34

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, 36, 39, 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	In accordance with letter dated **June 19, 2008,**
1. Hercules Incorporated Aqualon Division 2. 11083 Highway D Louisiana, MO 63353	3. License number 24-03060-01 is amended in its entirety to read as follows: 4. Expiration date September 30, 2010 5. Docket No. 030-05086 Reference No.

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. Cesium-137	A. Sealed sources registered either with NRC under 10 CFR 32.210 or with an Agreement State and incorporated in a compatible gauging device as specified in Item 9 of this license.	A. No single source to exceed the maximum activity specified in the certificate of registration issued by NRC or an Agreement State. Total possession limit of 800 millicuries.

9. Authorized Use:

A. For use in fixed gauging devices manufactured by Ohmart/**Vega** Corp. Models SH-F1A, SHRM-PA, SHLG-1, SHLG-2, **SHLD-1** and Amersham (Kay Ray) Model 7062B.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 11083 Highway D, Louisiana, Missouri.

11. Licensed material shall be used by, or under the supervision of individuals who have received the training described in application dated August 22, 2000. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.

12. A. The Radiation Safety Officer for the activities authorized by this license is Minh Hoac.

B. The Alternate Radiation Safety Officer for the activities authorized by this license is Tony McCallister.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
24-03060-01

Docket or Reference Number
030-05086

Amendment No. 34

13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State.

    B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.

    C. Sealed sources need not be tested if they are in storage and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

    D. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.

    E. The licensee is authorized to collect leak test samples for analysis by persons specifically licensed by the Commission or an Agreement State to perform such services.

    F. Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years.

14. Sealed sources containing licensed material shall not be opened or removed from the gauges by the licensee.

15. The following services shall not be performed by the licensee: installation, initial radiation surveys, relocation, removal from service, dismantling, alignment, replacement, disposal of the sealed source and non-routine maintenance or repair of components related to the radiological safety of the gauge (i.e., the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, shielding). These services shall be performed only by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

16. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
24-03060-01

Docket or Reference Number
030-05086

Amendment No. 34

17. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above, and below the gauge with the shutter open. This survey shall be performed only by persons authorized to perform such services by the U.S. Regulatory Commission or an Agreement State.

18. The licensee shall operate each device containing licensed material within the manufacturer's specified temperature and environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.

19. The licensee shall assure that the shutter mechanism of each device is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify, as appropriate, its "lock-out" procedures whenever a new device is obtained to incorporate the device manufacturer's recommendations.

20 The licensee shall perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20.

21. The licensee shall implement and maintain procedures for routine maintenance of gauges according to each manufacturer's or distributor's written recommendations and instructions.

22. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

23. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.

    A. Application dated August 22, 2000, (excluding reference to letter dated May 14, 1979), and;

    B. Letters dated September 1, 2000, October 31, 2001, August 22, 2006, October 4, 2006 (with attachment), February 8, 2008 (with attachments), and **June 19, 2008**.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUN 24 2008

By Loren J. Hueter
Loren J. Hueter
Materials Licensing Branch
Region III