

**MATERIALS LICENSE**  
SUPPLEMENTARY SHEET

License number

35-20500-01

Docket or Reference number

030-18450

Amendment No. 02

Kerr-McGee Corporation  
Kerr-McGee Center, MT-2101  
Oklahoma City, OK 73125

In accordance with letter dated July 19, 1985, License Number 35-20500-01 is amended as follows:

Items 6., 7., 8., and 9. are amended to add:

|   |  |  |
|---|--|--|
| 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 |
| F. Cesium-137   | F. Sealed Source (Troxler Dwg. No. 102112) | F. No single source to exceed 10 millicuries each.                             |
| G. Americium-241                                      | G. Sealed Source (Troxler Dwg. No. 102451) | G. No single source to exceed 50 millicuries each.                             |

9. Authorized Use

F. and G. To be used in Troxler Series 3400 moisture/density gauge to measure moisture/density of soil.

Conditions 12., 12., and 17. are amended to read:

12. A. Licensed material shall be used by, or under the supervision of, Michael Hampton, James D. Allen, Charles M. Dietzel, Robert M. Keith, Donald G. Musser, or Stephen R. Reed.
- B. Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have satisfactorily completed the device manufacturer training program for gauge users and have been designated by the licensee's Radiation Protection Officer. The licensee shall maintain records of the individuals who have been designated as authorized users.
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.
- (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.

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- 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 or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
- E. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated July 19, 1985 for analysis by Troxler Electronics. 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.
17. 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 February 20, 1984 and letters dated April 26, 1984, and July 19, 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 William J. Adam, Ph.D.

Materials Licensing Section, Region III

Date August 14, 1985

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