

MATERIALS LICENSE

Amendment No. 12
CORRECTED COPY

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. Kerr-McGee Corporation	In accordance with letter dated July 22, 1986 3. License number 35-12636-06 is amended in its entirety to read as follows:	
2. Kerr-McGee Center, 2102 Oklahoma City, Oklahoma 73125	4. Expiration date March 31, 1988 5. Docket or Reference No. 030-08401	
6. Byproduct, source, and/or special nuclear material A. Any byproduct material with Atomic Numbers 3 through 97, inclusive B. Cesium-137 C. Americium-241 D. Americium-241 E. Plutonium-238 F. Plutonium-238 G. Uranium-233	7. Chemical and/or physical form A. Any B. Sealed sources C. Sealed sources (New England Nuclear Model NCR-476A) D. Sealed foil source (Amersham/Searle Model AMN.4) E. Sealed sources (Texas Nuclear Model 570-57242B) F. Any G. Any	8. Maximum amount that licensee may possess at any one time under this license A. Not to exceed 100 millicuries per radionuclide B. See Item 9.B. C. Not to exceed 100 millicuries per source D. Not to exceed 0.5 microcurie per source E. 60 millicuries F. 1 microcurie G. 15 microcuries

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9. Authorized use

- A. For use as reference standards, research and development, and analytical methods development.
- B. For possession and use in Kay-Ray and Texas Nuclear devices which have been evaluated and approved for licensing purposes and authorized for distribution under a license issued by the Nuclear Regulatory Commission or an Agreement State.
- C. For use in a New England Nuclear x-ray fluorescence analyzer for sample analysis.
- D. and E. For use in Texas Nuclear Model 9200 x-ray fluorescence analyzer for sample analysis and internal standardization.
- F. and G. For use as reference and analytical standards.

CONDITIONS

- 10. A. Licensed material may be used at the Kerr-McGee Technical Center, 3301 Northwest 150th Street, Oklahoma City, Oklahoma, and at other Kerr-McGee facilities, as temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
- B. The licensed material specified in Subitem 6.B. may also be used at the Kerr-McGee Cimarron facility located on Highway 74, 6 miles south of Crescent, Oklahoma.
- 11. Licensed material shall be used by, or under the supervision of, W. J. Robertson, Gareth E. Van De Steeg, Donald E. Rhodes, Robert E. Leonard, John M. Carver, Ronald L. Fine, Patrick R. Rosebeary, Waymon C. Momsen, or Scott C. Munson.
- 12. A. (1) Each sealed source acquired from another person and containing licensed material, other than hydrogen-3, with a half-life greater than 30 days and in any form other than gas shall be tested for contamination and/or leakage before use. In the absence of a certificate from a transferor indicating that a test has been made within 6 months before the transfer, a sealed source received from another person shall not be put into use until tested.

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12. (continued)

- (2) The sources specified in Item 9.B shall be tested for leakage and/or contamination at intervals not to exceed 3 years. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.
 - (3) 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.
 - (4) Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage before any use or transfer to another person unless they have been leak tested within 6 months before the date of use or transfer.
- B. Each sealed source containing licensed material, other than hydrogen-3, with a half-life greater than 30 days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed 6 months except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed 3 months.
- C. 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 or semipermanently 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. Records may be disposed of following Commission inspection.

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12. (continued)

D. If the test required by Subsection A. or B. of this condition 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 5 days of the test with the U. S. Nuclear Regulatory Commission, Region IV, 511 Ryan Plaza Dr., Suite 1000, Arlington, Texas 76011, ATTN: Chief, Nuclear Materials and Emergency Preparedness Branch, describing the equipment involved, the test results, and the corrective action taken.

13. Sealed sources containing licensed material shall not be opened.

14. Installation, initial radiation survey, relocation, removal from service, maintenance, and repair of devices containing sealed sources shall be performed only by Robert E. Leonard, Donald E. Rhodes, W. J. Robertson, John M. Carver, or persons specifically licensed by the Commission or an Agreement State to perform such services. Installation, replacement, and disposal of sealed sources shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services.

15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 2 years from the date of each inventory.

16. Licensed material shall not be used in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.

17. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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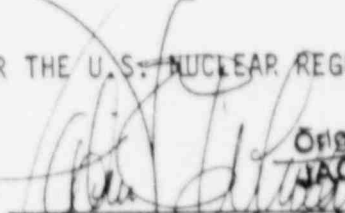
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18. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear 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 January 14, 1982
- B. Letter dated May 18, 1982
- C. Letter dated November 15, 1982
- D. Letter dated February 14, 1983
- E. Letter dated August 6, 1985
- F. Letter dated July 22, 1986

Date AUG 6 1987

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

By  Original signed by
JACK E. WHITTEN
Nuclear Materials Safety Section
Region IV
Arlington, Texas 76011

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