

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. Shirley Contracting Corporation	3. License number	45-23089-01
2. 8435 Backlick Road Lorton, Virginia 22079-1498	4. Expiration date	July 31, 1990
	5. Docket or Reference No.	030-28771
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 source (Troxler Dwg. A-102112)	A. No single source to exceed 10 millicuries
B. Americium 241	B. Sealed neutron source (Troxler Dwg. A-102451)	B. No single source to exceed 50 millicuries
9. Authorized use		
A. and B. For use in the Troxler Model 3400 series moisture/density gauge to measure properties of materials.		

★ CONDITIONS ★

10. Licensed material may be used at Shirley Contracting Corporation, 8435 Backlick Road, Lorton, Virginia and at temporary job site of the licensee anywhere in 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. Licensed material shall be used by, or under the supervision and in the physical presence of, Brent Du Bose or any licensee employee satisfactorily completing the Troxler training program and who has been trained in the licensee's operating and emergency procedures.
13. Sealed sources containing licensed material shall not be opened or removed from moisture/density devices by the licensee.

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SUPPLEMENTARY SHEET

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CONDITIONS

14. 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.
- (3) 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 prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.
- 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 II, Division of Radiation Safety and Safeguards, Nuclear Materials Safety Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323, 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 application dated July 17, 1985, for analysis by Gamma Industries. 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.
15. 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."

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16. 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 moisture/density devices and the date of the inventory.
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 July 17, 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

EARL G. WRIGHT

Date JUL 30 1985

By

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Safety Section
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