

MATERIALS LICENSE

Amendment No. 13

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.

<p>Licensee</p> <p>1. State of Montana Department of Highways Materials Bureau</p> <p>2. 2701 Prospect Avenue Helena, Montana 59620</p>	<p>In accordance with letters dated June 30, 1987 and July 9, 1987</p> <p>3. License number 25-11498-01 is amended in its entirety to read as follows:</p> <p>4. Expiration date March 31, 1989</p> <p>5. Docket or Reference No. 030-05179</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Cesium-137/ Americium-241</p> <p>B. Cesium-137</p> <p>C. Americium-241</p> <p>D. Cesium-137</p> <p>E. Americium-241</p>	<p>7. Chemical and/or physical form</p> <p>A. Combined sealed sources (Troxler Dwg. A-100281, Revision B)</p> <p>B. Sealed sources (Troxler Dwg. A-102112)</p> <p>C. Sealed neutron source (Troxler Dwg. A-102451)</p> <p>D. Sealed sources (Texas Nuclear Model RR-137, RR-138, or 850263)</p> <p>E. Sealed neutron sources (Monsanto Research Model NS-22-NC)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not to exceed 10 millicuries of Cesium-137 and 50 millicuries of Americium-241 per source</p> <p>B. Not to exceed 10 millicuries per source</p> <p>C. Not to exceed 50 millicuries per source</p> <p>D. One source of 3.5 millicuries and one source of 20 microcuries</p> <p>E. Not to exceed 80 millicuries per source</p>

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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. Americium-241

F. Sealed neutron sources (Troxler Dwg. A-100337)

F. Not to exceed 330 millicuries per sources

G. Americium-241

G. Sealed calibration sources

G. Not to exceed 5 microcuries

H. Cesium-137

H. Sealed calibration sources

H. Not to exceed 20 microcuries

9. Authorized use:

- A. For use in Troxler Model 2401 surface moisture density gauges.
- B. and C. For use in Troxler Model 3400 Series moisture density gauges.
- D. For use in Texas Nuclear Model P-20 depth density gauges.
- E. For use in Texas Nuclear Model 5806 depth moisture gauges.
- F. For use in Troxler Model 3241 gauges to measure asphalt content of aggregate paving mixtures.
- G. and H. To be used for training of personnel in leak testing procedures.

CONDITIONS

- 10. Licensed material may be used anywhere in the state of Montana.
- 11. Licensed material shall be used by, or under the supervision and in the physical presence of individuals designated by the licensee's 11 Division Materials Supervisors.

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12. A. (1) The sources specified in Items 7.A. through 7.H. shall be tested for leakage and/or contamination at intervals not to exceed 6 months. 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.
- (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. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.
- C. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas 76011, ATTN: Chief, Nuclear Materials and Emergency Preparedness Branch. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.
- D. The licensee is authorized to collect leak test samples for analysis by Troxler Electronics Laboratories, Inc., or tests for leakage and/or contamination shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
13. Sealed sources containing licensed material shall not be opened.
14. Maintenance or repair of portable devices involving removal of the sealed sources from the devices or removal or dismantling of shielding may be performed only by the licensee, the device manufacturer, or by other persons specifically authorized by the Commission or an Agreement State to perform such services.

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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. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
17. 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 December 19, 1977
 - B. Letter dated June 26, 1978
 - C. Letter dated August 17, 1978
 - D. Letter dated October 11, 1983
 - E. Letter dated June 30, 1987
 - F. Letter dated July 9, 1987
 - G. Letter dated July 31, 1987

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Original signed by
JACK E. WHITTEN

Date AUG 27 1987

By

Nuclear Materials Licensing Section
Region IV
Arlington, Texas 76011

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