

**OFFICIAL RECORD COPY**

**MATERIALS LICENSE**

Amendment No. 1

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.

DL-072596-12

<p style="text-align: center;">Licensee</p> <p>1. <b>EARTH TECH, Inc.</b> Formerly Applied Technology &amp; Engineering</p> <p>2. 1115 5th Street, S.W. Charlottesville, VA 22902-6465</p>	<p>In accordance with letter dated January 19, 1996</p> <p>3. License Number 45-25228-01</p> <p>is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration Date January 31, 2003 (Extended)</p> <hr/> <p>5. Docket or Reference No. 030-33014</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
A. Cesium 137	A. Sealed source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	A. No single source to exceed 10 millicuries
B. Americium 241	B. Sealed neutron source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	B. No single source to exceed 50 millicuries
C. Californium 252	C. Sealed source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	C. No single source to exceed 66 microcuries

9. Authorized Use:

A. through C. For use in Troxler Model 3400 series, Model 4640 or Model 3216 portable gauging devices to measure properties of materials.

**CONDITIONS**

- 10. Licensed material may be used at the licensee's facilities located at 1115 5th Street, Charlottesville, Virginia and at 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.
- 11. The Radiation Protection Officer for this license is John Y. Gooch.

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SUPPLEMENTARY SHEET**

License Number 45-25228-01

Docket or Reference Number 90-33014

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**CONDITIONS**

12. Licensed material shall only be used by, or under the supervision and in the physical presence of, John Y. Gooch or individuals who have successfully completed the manufacturer's training program for gauge users, have been instructed in the licensee's routine and emergency operating procedures and who have been designated by the Radiation Safety Officer.
13. Sealed sources containing licensed material shall not be opened or removed from the gauging device by the licensee.
14. A.(1) Sealed sources specified in Item 7, shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210. 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 II, Division of Radiation Safety and Safeguards, Nuclear Material Inspection Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323. 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 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.
15. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
17. The licensee shall maintain records of information important to safe and effective decommissioning at location specified in Condition 10, pursuant to the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.

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CONDITIONS

- 18. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum specified 10 CFR 30.35(d) for establishing decommissioning financial assurance.
- 19. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage or when not under the direct surveillance of an authorized user.
- 20. Any cleaning, maintenance, or repair of the gauge(s) that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
- 21. 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 November 9, 1992
  - B. Letter dated January 19, 1996 [Licensee name change and change of ownership]
  - C. NRC letter dated March 1, 1996 [Extends license expiration date pursuant to 10 CFR 30.36]
  - D. Facsimile transmission dated July 19, 1996 [Licensee's response to change of ownership questionnaire]

FOR THE U. S. NUCLEAR REGULATORY COMMISSION

EARL G. WRIGHT

*Earl G. Wright*

Date JUL 25 1996

*Ernest  
7/26/96*

By \_\_\_\_\_  
Region II, Division of Nuclear Materials Safety  
101 Marietta Street, N.W., Suite 2900  
Atlanta, Georgia 30323-0199