NRC FORM 374
(7-84)

U.S. NUCLEAR REGULATORY COMMISSION

OFFICIAL RECORD COPY

MATERIALS LICENSE

DL-091895_03

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.

Licensee		
1. Science and Technology Corp.	3. License Number	45-25341-01
2. 4483 James Madison Parkway, Suite 3 King George, Virginia 22485	4. Expiration Date	September 30, 2000
	5. Docket or Reference No.	030-33901

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. Americium 241	A. Foil source assembly (Amersham Model No. AMM), registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation (Note: Foil source (Model AMM) installed in customer holder by Amersham)	A. Not to exceed 110 microcuries per source 15 millicuries total

9. Authorized Use:

A. Foil source assembly shall be installed and tested, only in finished gas detection equipment registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation (Gas detector IPDS to be registered by Department of the Navy), incident to distribution to Department of the Navy authorized recipients.

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CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 400 Interstate Business Park, Fredericksburg, VA and may be stored and demonstrated at 4483 James Madison Parkway, Suite 3, King George, VA.

11. The Radiation Protection Officer for this license is Rodney Dodd or in his absence Harry Barrick, Alternate. Radiation Safety Consultant Lee Anthony, Ph.D., Physics Associates, Inc.

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12. Licensed material shall be used by, or under the supervision of, Rodney Dodd, or Harry Barrick.

13. A. Sealed sources and detector cells 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.

B. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.

C. Sealed sources or detector cells need not be leak tested if, they contain only hydrogen-3 or only a radioactive gas, or not more than 100 microcuries of beta and/or gamma emitting material or are in storage and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

D. The leak 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, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The 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 30323-0199. The report shall specify the source involved, the test results, and corrective action taken.

E. The licensee is authorized to collect leak test samples for analysis by Physics Associates 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.

14. The licensee shall not remove foil sources from the cell module (source assembly) identified in Item 7.A above.

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.

16. The licensee shall maintain records of information important to safe and effective decommissioning at the location specified in Condition 10 in accordance with the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.

17. In addition to the possession limits in condition 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

18. Maintenance, repair, cleaning, replacement and disposal of foil sources identified in Item 7.A above shall be performed only by the source manufacturer or other persons specifically authorized by the Commission or an Agreement State to perform such services.

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19. 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."

20. A. The licensee may not possess and use materials authorized in items 6., 7., and 8. until: 1) the licensee has constructed the facilities and obtained the equipment described in the application and supporting documentation; and 2) the U.S. Nuclear Regulatory Commission, Region II, ATTN: Chief, Nuclear Materials Inspection Section, 101 Marietta Street, N.W., Suite 2900, Atlanta, Georgia 30323, has been notified that activities authorized by the license will be initiated.

B. Within 30 days of the date of a decision not to complete the facility, acquire equipment, or possess and use authorized materials, the licensee must notify the NRC, in writing, of that decision.

21. **A. The licensee shall not acquire licensed material in a sealed source or device that contains a sealed source unless the source and/or device has been registered with the Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State.**

B. The licensee shall not distribute any device containing licensed material unless the device and source combination is registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation. In addition, the licensee shall provide prior written notification to NRC of the registry number of any source and/or device it intends to distribute.

22. 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 June 30, 1995

B. FAX dated September 15, 1995 [Clarification of foil source model number and device registration]

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

EARL G. WRIGHT

Date SEP 18 1999

By Earl G. Wright
Region II, Nuclear Materials Licensing Section
101 Marietta Street, Suite 2900
Atlanta, GA 30323

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