

DL-030695-02



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W., SUITE 2900  
ATLANTA, GEORGIA 30323-0199

MAR 6 1995

COPIES

College of William & Mary  
ATTN: Richard L. Kiefer  
Radiation Safety Officer  
P.O. Box 8795  
Williamsburg, VA 23185-8795

Docket No. 030-31503  
License No. 45-03499-09  
Control No. 256325

Gentlemen:

SUBJECT: LICENSE RENEWAL APPLICATION

This is to acknowledge receipt of your application for renewal of the nuclear material license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

Any correspondence regarding your renewal application should reference the control number and license number specified above.

Sincerely,

Earl G. Wright  
Nuclear Materials Licensing Section  
Division of Radiation Safety  
and Safeguards



**MATERIALS LICENSE**

Amendment No. 2

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.

<p style="text-align: center;">Licensee</p> <p>1. College of William and Mary Department of Chemistry</p> <p>2. Williamsburg, Virginia 23185</p>	<p>In accordance with letter dated February 20, 1995</p> <p>3. License Number <b>45-03499-09</b></p> <p>is renewed in its entirety to read as follows:</p> <hr/> <p>4. Expiration Date <b>March 31, 2000</b></p> <hr/> <p>5. Docket or Reference No. <b>030-31503</b></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. Hydrogen 3	A. Foils and/or liquid	A. 72 millicuries
B. Carbon 14	B. Sealed sources and liquids	B. 1 millicurie
C. Sulfur 35	C. Powder and solution	C. 11 millicuries
D. Chlorine 36	D. Sealed source	D. 0.5 microcurie
E. Cobalt 60	E. Sealed source	E. 0.5 microcurie
F. Selenium 75	F. Aqueous solution	F. 0.01 microcurie
G. Barium 133	G. Sealed source	G. 0.5 microcurie
H. Cesium 137	H. Sealed source	H. 2 microcuries
I. Promethium 147	I. Sealed source	I. 0.01 microcurie
J. Lead 210	J. Sealed source and/or aqueous solution	J. 0.6 microcurie
K. Phosphorus 32	K. Aqueous solution	K. 2 millicuries
L. Strontium 90	L. Sealed source	L. 0.21 microcurie

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*Handwritten signature/initials*

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

45-03499-09

Docket or Reference Number

030-31503

Amendment No. 2

9. Authorized Use:

A. through L. Storage only incident to disposal.

**CONDITIONS**

10. Licensed material shall be stored only at the licensee's facilities, College of William and Mary, Williamsburg, Virginia.
11. The Radiation Protection Officer for this license is Richard L. Kiefer, Ph.D.
12. Licensed material shall be stored by, or under the supervision of, Richard L. Kiefer, Ph.D. or Patricia M. Kane, Ph.D.
13. Sealed sources containing licensed material shall not be opened by the licensee.
14. A.(1) The source(s) specified in Item 7, 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 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. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
15. The licensee shall maintain records of information important to safe and effective decommissioning at the licensee's facilities as 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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SUPPLEMENTARY SHEET**

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(cont.)

**CONDITIONS**

- 16. 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 in 10 CFR 30.35(g) for establishing decommissioning financial assurance.
- 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 January 31, 1990
  - B. Letters dated:
    - March 7, 1990
    - January 17, 1992
    - January 23, 1992 (faxed)
    - February 3, 1995 [Add small sealed source to license]
    - February 20, 1995 [Request to renew license for storage only pending disposal of licensed material.]

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

EARL G. WRIGHT

Date MAR 24 1995

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