

U. S. NUCLEAR REGULATORY COMMISSION  
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 1, Parts 30, 31, 32, 33, 34, 35, 36, 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); and to import such byproduct and source material. 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		<i>Basic License</i> K VII, I —	
1. <b>Spectra/Science/Technology &amp; Associates, Inc.</b>		3. License number	<b>24-27133-01</b>
2. <b>22661 Louisa Road St. Louis, Missouri 63141</b>		4. Expiration date	<b>September 30, 1981</b>
		5. Docket or Reference No.	<b>030-12280</b>
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	
<b>A. Nickel 63</b>	<b>A. Metal plated in Hewlett-Packard detector cell contained in Hewlett-Packard Model 18713A electron capture detector</b>	<b>A. 2 cells containing 15 milligrams each Total 30 milligrams</b>	

**9. Authorized use**

**A. For use in Hewlett-Packard Gas Chromatograph for sample analysis.**

**CONDITIONS**

**10. Licensed material shall be used only at the licensee's address stated in Item 2 above.**

**11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Licensees; Inspections" and Part 20, "Standards for Protection Against Radiation."**

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Supplementary Sheet

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CONDITIONS

Docket or

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(continued)

12. Licensed material shall be used by, or under the supervision of, D. C. Kennedy, J. A. Jargial, or C. A. Hammer, Sr.
13. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in Section 20.203(a)(1), Title 10, Code of Federal Regulations, Part 20, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.
14. A. Each chromatograph detector containing Nickel 63 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 detector received from another person shall not be put into use until tested.
  - 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 surfaces of the device in which the foil is 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 foil 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 5 days of the test with the U. S. Nuclear Regulatory Commission, Office of Inspection and Enforcement, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
  - D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.

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(continued)

15. Detector cells containing licensed material shall not be opened by the licensee.
16. 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 2, 1976, as amended August 27, 1976.
- auth* *auth*

SEP 1 1976

Date \_\_\_\_\_

OCT 1 1976

For the U. S. Nuclear Regulatory Commission

by Radiisotopes Licensing Branch

Division of Fuel Cycle and  
Material Safety  
Washington, D.C. 20555