

MATERIALS LICENSE

Amendment No. 04

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); 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		In accordance with application dated April 5, 1985,	
1. Department of Transportation Coast Guard Research and Development Center		3. License number 06-16731-01 is amended in its entirety to read as follows:	
2. Chemistry Branch Avery Point Groton, Connecticut 06340		4. Expiration date June 30, 1990	
		5. Docket or Reference No. 030-11550	
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. Nickel 63	A. Foils in Perkin-Elmer Model 009-0282 detector cells	A. Not to exceed 15 millicuries per foil	
B. Nickel 63	B. Plated sources in Hewlett-Packard Model 19303 detector cells	B. Not to exceed 15 millicuries per source	
C. Hydrogen 3	C. Foils contained in Analytical Instrument Model 510-6007 detector cells	C. Not to exceed 200 millicuries per foil	
D. Barium 133	D. Sealed sources (Amersham Model BDC-700)	D. Not to exceed 1 millicurie per source	
9. Authorized use			
A. through C. For use in gas chromatographs for sample analysis.			
D. For use in a Campbell Engineering Model K series density gauge.			

CONDITIONS

10. Licensed material may be used at Avery Point, Groton, Connecticut 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 licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions, and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
12. Licensed material shall be used by, or under the supervision of, Alan P. Bentz: Licensed material in Subitem 6.D. may only be used by, or under the supervision and in the physical presence of, individuals designated by the radiation safety officer who have satisfactorily completed the training course outlined in attachment to letter dated May 22, 1985, and have been instructed in the licensee's operating and emergency procedures.

"OFFICIAL RECORD COPY"

B507180157 B50619
REG1 LIC30
06-16731-01 PDR

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

06-16731-01

Docket or Reference number

030-11550

Amendment No. 04

(Continued)

CONDITIONS

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, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406, describing the equipment involved, the test results, and the corrective action taken.
D. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated May 22, 1985 for analysis by Chemical Waste Management, Inc. Alternatively, leak test samples may be collected and/or analyzed by other persons specifically authorized by the Commission or an Agreement State to perform such services.
15. The licensee shall conduct a physical inventory every six (6) months to account for all foils, plated sources, and sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of foils, plated sources, sealed sources, and the date of the inventory.
16. Detector cells containing licensed material shall not be opened or the foil sources removed from the detector cell by the licensee.
17. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."
18. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License number

06-16731-01

Docket or Reference number

030-11550

Amendment No. 04

(Continued)

CONDITIONS

19. A. (1) Each sealed source containing licensed material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas 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 sealed source received from another person 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.
- (3) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.
- 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 sealed source or from the surfaces of the device in which the sealed source is permanently 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 sealed source 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, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406, describing the equipment involved, the test results, and the corrective action taken.
- D. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated May 22, 1985 for analysis by Chemical Waste Management, Inc. Alternatively, leak test samples may be collected and/or analyzed by other persons specifically authorized by the Commission or an Agreement State to perform such services.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

06-16731-01

Docket or Reference number

030-11550

Amendment No. 04

(Continued)

CONDITIONS

20. 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 April 5, 1985 and letters dated May 10, 1985 and May 22, 1985. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.



For the U.S. Nuclear Regulatory Commission

Original Signed By

John E. Glenn

By

Nuclear Materials Safety and
Safeguards Branch, Region I
King of Prussia, Pennsylvania 19406

Date

JUN 19 1985