



New England Marine Research Laboratory
397 Washington Street
Duxbury, Massachusetts 02332
Telephone (617) 934-5682

September 6, 1985

Ms. Jenny M. Johansen, M.S.
U.S. Nuclear Regulatory Commission
Region I
Nuclear Materials Section B
631 Park Avenue
King of Prussia, Pennsylvania 19406

Oct 4th
Check No. 3659
Amount/Fee Category 1/20(3M)
Type of Fee AMO
Date Check Rec'd 10/9/85
Received By SK

RE: NRC License Number 20-20744-01; Expiration Date September 30, 1989;
Docket/Ref. No. 030-22023.

Dear Ms. Johansen:

Enclosed please find a copy of our Byproduct Material License. As Michael Barrows discussed with you in your conversation of September 4, 1985, our laboratory would like to amend our present license in order to increase the maximum amount of carbon 14 to 25 millicuries (Item 8-C). In addition, we ask that our amended license include the addition of tritium (3H), with a maximum amount of 25 millicuries, which will be used in our laboratories for research and development as defined in 10CFR30.4(q).

A check payable to the order of the U.S. Nuclear Regulatory Commission for the sum of One Hundred Twenty Dollars (\$120.00) as the fee for amending our present license, Category 3M, is also enclosed.

Thank you for your assistance.

Sincerely yours,

Robert Scott Carr
Robert Scott Carr, Ph.D.
Research Scientist

RSC:mad

Enc: (Copy of Byproduct Material License and a Check to NRC for \$120.00)

RECEIVED
85 OCT -9 AM 0:37
U.S. N.R.C.
12. FEE MGMT. BRANCH

8512160388 851025
REG 1 LIC30
20-20744-01 PDR

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1985 SEP 12 PM 2:31

"OFFICIAL RECORD COPY"

SEP 12 1985 ML10 104456

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 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). 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		3. License number	20-20744-01
1. Batelle New England Marine Research Laboratory		4. Expiration date	September 30, 1989
2. 397 Washington Street Duxbury, Massachusetts 02332		5. Docket or Reference No.	030-22023
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. Plated sources in Hewlett-Packard Model 19312 detector cell	A. Not to exceed 15 millicuries per source	
B. Nickel 63	B. Plated sources in Shimadzu Model EDC-9 detector cell	B. Not to exceed 10 millicuries per source	
C. Carbon 14	C. Any	C. 3 millicuries	
9. Authorized use			
A. For use in Hewlett-Packard gas chromatograph for sample analysis.			
B. For use in Shimadzu Model 9A gas chromatograph for sample analysis.			
C. For Research and Development as defined in 10 CFR 30.4(q).			

CONDITIONS

10. Licensed material shall be used only at 397 Washington Street, Duxbury, Massachusetts.
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, Robert Scott Carr, Paul D. Boehm, or Don McKown.
13. Detector cells containing licensed material shall not be opened or the foil sources removed from the detector cell by the licensee.
14. 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.

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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

20-20744-01

Docket or Reference number

030-22023

(continued)

CONDITIONS

15. 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. 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.
16. The licensee shall conduct a physical inventory every six (6) months to account for all plated sources in detector cells 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 licensed material, location of plated sources in detector cells and the date of the inventory.
17. The licensee shall not use licensed material in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.
18. 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 August 2, 1984, and letter dated August 13, 1984. 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
Jenny M. Johansen

Date 04 SEP 1984

By

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