NRC Form 374
(5-84)

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 12

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	
1. Department of the Navy Naval Undersea Warfare Engineering Station 2. Weapons Quality Engineering Center, Code 3222 Keyport, Washington 98345	In accordance with letter dated July 8, 1985 3. License number 46-09611-02 is amended in its entirety to read as follows:
	4. Expiration date: November 30, 1988
	5. Docket or Reference No.: 030-09446

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. Titanium tritide foils in Analytical Instrument Development Model 510-6007 Detector Cells	A. Not to exceed 200 millicuries per foil
B. Nickel 63	B. Plated sources in Hewlett Packard Model 18713A or 19303 Detector Cells	B. Not to exceed 15 millicuries per foil
C. Hydrogen 3	C. Titanium tritide foils (Pye Dynamics Dwg. No. 400-A3-8161) in Custom Made Grasely Dynamic/Pye Dynamics Model PD2F/PD2G Detector Cells	C. Not to exceed 250 millicuries per foil

9. Authorized use

A., B. and C. For use in gas chromatographs for sample analysis.

CONDITIONS

10. Licensed material shall be used only at Naval Undersea Warfare Engineering Station, Keyport, Washington.

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

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CONDITIONS

12. Licensed material shall be used by, or under the supervision of, individuals trained in accordance with procedures contained in application dated May 13, 1983 and designated by the Radiation Protection Officer, Richard Yale.

13. Detector cells containing titanium tritide foil shall only be used in conjuction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 225 degrees Centigrade.

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.

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 five (5) days of the test with the U. S. Nuclear Regulatory Commission, Region V, 1450 Maria Lane, Suite 210, Walnut Creek, California 94596, 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 October 7, 1983 for analysis by Nuclear Radiation Developments, Inc. Grand Island, New York. 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
46-09611-02
Docket or Reference number
030-09446

Amendment No. 12

CONDITIONS

16. The licensee shall conduct a physical inventory every six (6) months to account for all foils and plated 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, location of foils and plated sources, and the date of the inventory.

17. Detector cells containing licensed material shall not be opened or the foil sources removed from the detector cell by the licensee.

18. 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".

19. 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 May 13, 1983; and letters dated October 7, 1983 and July 8, 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

DATE SEP 05 1985

BY Original Signed By John E. H. Hickey

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

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