

MATERIALS LICENSE

Amendment No. 05

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 by product, 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		In accordance with letter dated August 25, 1986,	
1. Dana-Farber Cancer Institute		3. License number 20-19761-01 is amended in its entirety to read as follows:	
2. 44 Binney Street Boston, Massachusetts 02115		4. Expiration date April 30, 1992	
		5. Docket or Reference No. 030-19201	
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. Cesium 137	A. AECL Model C-161 Type 8 sealed sources	A. 3,100 curies two sources of 1,500 curies each	
B. Cesium 137	B. Sealed source, Model ISO-1000	B. 2,880 curies (4 sources not to exceed 720 curies each)	
9. Authorized use			
A. For use in an AECL Gammacell 40 irradiator for the irradiation of small animals and biologic samples.			
B. For use in AECL Gammacell 1000 irradiator, Model D, for irradiation of materials (excluding explosive and highly flammable materials).			

CONDITIONS

10. A. Licensed material in Item 6.A. shall be used only at the Dana-Farber Cancer Institute, Michael A. Pedstone Building, 462 Brookline Avenue, Boston, Massachusetts.
- B. Licensed material in Item 6.B. shall be used only at 44 Binney Street, Boston, Massachusetts.
11. Licensed material shall be used by individuals designated by licensee's Radiation Safety Committee.
12. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders or detector cells by the licensee.
13. A. Any sealed sources or detector cells specified in Items 7.A. and 7.B. shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source or detector cell 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.

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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number:

20-19761-01

Docket or Reference number:

030-19201

Amendment No. 05

(13. continued)

CONDITIONS

- B. Any sealed source or detector cell in storage and not being used need not be tested. When the source or detector cell 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 or detector cell 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 I, ATTN: Chief, Nuclear Materials Safety and Safeguards Branch, 631 Park Avenue, King of Prussia, Pennsylvania 19406. 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.
14. The licensee shall not perform repairs or alterations of the irradiator involving removal of shielding or access to the licensed material. Removal, replacement, and disposal of sealed sources in the irradiator shall be performed by a person specifically licensed by the Commission or an Agreement State to perform such services.
15. 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. Letter dated August 25, 1986
B. Letter dated April 2, 1987
C. Letter dated April 8, 1987

For the U.S. Nuclear Regulatory Commission

Original Signed By:

Jeremy M. Johnson

By

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

Date

MAY 05 1987