

UNITED STATES ATOMIC ENERGY COMMISSION
APPLICATION FOR BYPRODUCT MATERIAL LICENSE

INSTRUCTIONS. — Complete Items 1 through 16 if this is an initial application or an application for renewal of a license. Information contained in previous applications filed with the Commission with respect to Items 8 through 15 may be incorporated by reference provided references are clear and specific. Use supplemental sheets where necessary. Item 16 must be completed on all applications. Mail two copies to: U.S. Atomic Energy Commission, Washington, D.C., 20545, Attention: Isotopes Branch, Division of Materials Licensing. Upon approval of this application, the applicant will receive an AEC Byproduct Material License. An AEC Byproduct Material License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30, and the Licensee is subject to Title 10, Code of Federal Regulations, Part 20.

1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital, person, etc. Include ZIP Code.) Department of the Army Walter Reed Army Medical Center (WRAMC) Washington, D.C. 20012		(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED. (If different from 1 (a). Include ZIP Code.) 1. Walter Reed Army Medical Center, Washington, D.C. 20012 2. Forest Glen Section & Annex, Montgomery County, Maryland, 20910 (See Continuation Sheet)	
2. DEPARTMENT TO USE BYPRODUCT MATERIAL As designated by the Radioisotope Committee.		3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.) Renewal of 08-01738-02 in its entirety to read as follows. Expiration Date 31 Aug 74	
4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly supervise use of byproduct material. Give training and experience in Items 8 and 9.) Individual(s) approved by the Radioisotope Committee, Commander, Walter Reed Army Medical Center, Chairman.		5. RADIATION PROTECTION OFFICER (Name of person designated as radiation protection officer if other than individual user. Attach resume of his training and experience as in Items 8 and 9.) Ref: AR 40-14 & AR 40-37, The Health Physics Officer will be appointed by the Commander, Walter Reed Army Medical Center, Chairman of the Radioisotope Committee. SEE SUPPLEMENTS A AND B	
SEE SUPPLEMENTS B AND D.			
6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.) A. Any byproduct material with Atomic Nos. 3-83, inclusive B. Hydrogen 3 C. Cesium 137 (SEE CONTINUATION SHEET)		(b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLICURIES OF EACH CHEMICAL AND/OR PHYSICAL FORM THAT YOU WILL POSSESS AT ANY ONE TIME. (If sealed source(s), also state name of manufacturer, model number, number of sources and maximum activity per source.) A. Any A. 400 millicuries of each except: Iodine 131 - 2000 millicuries Xenon 133 - 5000 millicuries Krypton 85 - 5000 millicuries Gold 198 - 1000 millicuries Phosphorus 32 - 2000 millicuries Sulfur 35 - 1000 millicuries Carbon 14 - 2000 millicuries Iodine 125 - 1000 millicuries Iridium 192 - Total not to exceed 26 Curies B. 10,000 millicuries B. Any C. Sealed Sources C.	
Information in this record was deleted in accordance with the Freedom of Information Act, exemptions FOIA			
7. DESCRIBE PURPOSE FOR WHICH BYPRODUCT MATERIAL WILL BE USED. (If byproduct material is for "human use," supplement A (Form AEC-313a) must be completed in lieu of this item. If byproduct material is in the form of a sealed source, include the make and model number of the storage container and/or device in which the source will be stored and/or used.) A. through E. Medical research, diagnosis and therapy. Research and development as defined in Section 30.4(q), 10 CFR 30, "Rules of General Applicability to Licensing of Byproduct Material." F. through K. Research and Development as defined in Section 30.4(q), 10 CFR Part 30, "Rules of General Applicability to Licensing of Byproduct Material." L. For use in Calibration for calibration of instruments at the Health Physics Calibration Range, Walter Reed Army Medical Center. SEE SUPPLEMENT G for complete description. M. For use as standards or reference sources. N. Medical research. SEE SUPPLEMENT G for complete description.			

TRAINING AND EXPERIENCE OF EACH INDIVIDUAL NAMED IN ITEM 4 (Use supplemental sheets if necessary)

8. TYPE OF TRAINING	WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)	FORMAL COURSE (Circle answer)
a. Principles and practices of radiation protection	SEE SUPPLEMENTS B AND D		Yes No	Yes No
b. Radioactivity measurement standardization and monitoring techniques and instruments			Yes No	Yes No
c. Mathematics and calculations basic to the use and measurement of radioactivity			Yes No	Yes No
d. Biological effects of radiation			Yes No	Yes No

9. EXPERIENCE WITH RADIATION. (Actual use of radioisotopes or equivalent experience.)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
		SEE SUPPLEMENT B AND D		

10. RADIATION DETECTION INSTRUMENTS. (Use supplemental sheets if necessary.)

TYPE OF INSTRUMENTS (Include make and model number of each)	NUMBER AVAILABLE	RADIATION DETECTED	SENSITIVITY RANGE (mr/hr)	WINDOW THICKNESS (mg/cm ²)	USE (Monitoring, surveying, measuring)
		SEE SUPPLEMENT C			

11. METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED ABOVE.

SEE CONTINUATION SHEET

12. FILM BADGES, DOSIMETERS, AND BIO-ASSAY PROCEDURES USED. (For film badges, specify method of calibrating and processing, or name of supplier.)

Film badges furnished by Lexington-Blue Grass Army Depot in accordance with SB 11-206 Pocket Chambers and Self-Reading Pocket Dosimeters furnished at the discretion of the HPO. SEE SUPPLEMENTS D AND E.

INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS IN DUPLICATE

13. FACILITIES AND EQUIPMENT. Describe laboratory facilities and remote handling equipment, storage containers, shielding, fume hoods, etc. Explanatory sketch of facility is attached. (Circle answer) Yes (No) SEE SUPPLEMENT E

14. RADIATION PROTECTION PROGRAM. Describe the radiation protection program including control measures. If application covers sealed sources, submit leak testing procedures where applicable, name, training, and experience of person to perform leak tests, and arrangements for performing initial radiation survey, servicing, maintenance and repair of the source.

SEE SUPPLEMENTS A, D, E, F, AND H.

15. WASTE DISPOSAL. If a commercial waste disposal service is employed, specify name of company. Otherwise, submit detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved.

In accordance with AR 755-15; also See Supplements D, G, and F.

CERTIFICATE (This item must be completed by applicant)

16. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE APPLICANT NAMED IN ITEM 1, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PART 30, AND THAT ALL INFORMATION CONTAINED HEREIN, INCLUDING ANY SUPPLEMENTS ATTACHED HERETO, IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

FOR THE COMMANDER:

Applicant named in item 1

By:

FRED C. BRAND, LTC, MSC

Adjutant

Title of certifying official

Date 18 June 1974

WARNING: 18 U. S. C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

CONTINUATION SHEET - Form AEC-313

ITEM 1-B. 3. Fort Detrick, Maryland 21701
 4. Fort Myer, Virginia 22208

ITEM 6.

D. Molybdenum 99

D. Molybdenum 99/Technetium 99m Generators (E.R. Squibb and Sons Model Nos. 08871 and 09650; Abbott Labs Model Nos. 7721 and 6724; NEN Pharmaceuticals Model No. NRP-196; Mallinckrodt Chemical Works Model Nos. 100 thru 106, 006 thru 012; Cambridge Nuclear Corp. Model No. CN-4291; and Amersham/Searle Corp. Model Nos. GTC-50, GTC-100, GTC-200, GTC-300, and GTC-400)

D. 10 Curies

E. Technetium 99m

E. Pertechnetate

E. 5 Curies

F. Neptunium 237

F. Any

F. 10 millicuries

G. Americium 241

G. Any

G. 100 microcuries

H. Polonium 210

H. Any

H. 15 millicuries

I. Cesium 137

I.

J. Cobalt 60

J. Sealed Sources

J.

K. Strontium 90

K. Sealed Sources in Gas Chromatograph Devices

K.

L. Cesium 137

L.

L.

M. Americium 241

M. Any

M.

N. Americium 241

N. Sealed Sources

N.

ITEM 11.

Radiation Survey Instruments are calibrated every three (3) months or as required.

a. Beta-gamma survey instruments are calibrated with a 137-Cesium Calibrator and a 60-Cobalt sealed source.

b. Alpha survey instruments are calibrated with an AN/UDM-6, or equal Alpha Calibration Set.

c. Neutron survey instruments are calibrated with a (Sealed Source). Neutron Source

for end sheets
see sup^{pl} 50117