

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: Materials Branch, Directorate of 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, and the license fee provisions of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in Item 16 and the appropriate fee enclosed. (See Note in Instruction Sheet).

1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital, person, etc. Include ZIP Code and telephone number.) Commanding General Fitzsimons Army Medical Center Denver, Colorado 80240		(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED. (If different from 1(a), include ZIP Code.) Fitzsimons Army Medical Center 12101 East Colfax Avenue Aurora, Colorado 80240	
2. DEPARTMENT TO USE BYPRODUCT MATERIAL Department of Radiology Dept of Pathology Clinical Investigational Service		3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.) 05-00046-13 (Amendment)	
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 users will be approved by the Fitzsimons Army Medical Center Radioisotope Committee (See application dated 22 Feb 1974, Control No. 47342)		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.) The Radiation Protection Officer will be appointed by Special Orders in accordance with procedures contained in Medical Center Regulation 40-604 (See application dated 22 Feb 74, Control No. 47342).	
6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.)  See supplemental 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 source, and maximum activity per source.)  See supplemental sheet	
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.)  See supplemental sheet			

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

B. 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 application dated 22 Feb 74 Control No. 47342.		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 application dated 22 Feb 74 Control No. 47342.		

## 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 <sup>2</sup> )	USE (Monitoring, surveying, measuring)
See application dated 22 Feb 74 Control No. 47342.					

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

See application dated 22 Feb 74 Control No. 47342

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

See application dated 22 Feb 74 Control No. 47342

## 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 application dated 22 Feb 74 Control No. 47342

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 application dated 22 Feb 74 Control No. 47342

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.

See application dated 22 Feb 74 Control No. 47342

## 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.

License Fee Category \$ \_\_\_\_\_

Fee Enclosed \$ \_\_\_\_\_

Date 12 March 1975

Fitzsimons Army Medical Center

Applicant named in item 1

By:

PAUL E. SIEBER,

COL, MC, Chief, Dept of Radiology

Title of certifying official

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.

Item 6 continued:

1. Amendment requested to change para 6A, 7A, 8A of the existing license to read:

6A: Any byproduct material listed in Groups I, II, III, IV, V, VI of Schedule A, Section 35.100 of 10 CFR 35

7A: Any radiopharmaceutical listed in Groups I, II, III, IV, V, VI of Schedule A, Section 35.100 of 10 CFR 35

8A: As necessary for uses authorized in Subitem 9A.

9A: Any diagnostic procedure listed in Groups I, II, III, IV, V, VI of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations

DISCUSSION:

A major portion of the procedures listed in the above requested groups are already included as individual items under paragraphs 6 through 9 of the license 05-00046-13. Those procedures that are not already listed are certainly within the capability of this institution to perform both from the professional and radiation safety viewpoint.

2. Amendment requested to change the designation of the Licensee to the following designation, deleting all reference to the U. S. Army Medical Research and Nutrition Laboratory:

Department of the Army  
Fitzsimons Army Medical Center  
Denver, Colorado 80240

Form AEC-313a (2-73) 10 CFR 30 Page 1	UNITED STATES ATOMIC ENERGY COMMISSION <b>APPLICATION FOR BYPRODUCT MATERIAL LICENSE—MEDICAL</b> SUPPLEMENT A—HUMAN USE	Form approved Budget Bureau No. 38-R0030
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If byproduct material is for "human use" (internal administration of byproduct material, or the radiation therefrom to human beings), complete this supplement and attach to the application for byproduct material license.

1 (a) USING PHYSICIAN'S NAME  See item 4 AEC Form 313	(b) NAME AND ADDRESS OF APPLICANT (If different from 1(a), include ZIP Code.) Fitzsimons Army Medical Center 12101 East Colfax Avenue Aurora, Colorado 80240
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2 THE USING PHYSICIAN INDICATED ABOVE IS LICENSED TO DISPENSE DRUGS IN THE PRACTICE OF MEDICINE BY A STATE OR TERRITORY OF THE UNITED STATES, THE DISTRICT OF COLUMBIA, OR THE COMMONWEALTH OF PUERTO RICO.  <div style="text-align: right;">CIRCLE ANSWER</div>	(YES)	NO
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3 A STATEMENT OF USING PHYSICIAN'S CLINICAL RADIOISOTOPE EXPERIENCE (PAGE 3 OF THIS SUPPLEMENT) IS SUBMITTED IN SUPPORT OF THIS APPLICATION. IF ANSWER IS NO, USE PAGE 2 OF THIS SUPPLEMENT TO EXPLAIN OR REFER TO OTHER APPLICATION OR RELATED DOCUMENTS ON WHICH THIS INFORMATION APPEARS.  See item 4, AEC Form 313 and Appendix I  <div style="text-align: right;">CIRCLE ANSWER</div>	YES	NO
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4 A DESCRIPTION OF THE USING PHYSICIAN'S TRAINING AND EXPERIENCE IN BASIC RADIOISOTOPE HANDLING TECHNIQUES AND/OR RADIOPHARMACEUTICAL PREPARATION IS APPENDED.  See item 4, AEC Form 313 and Appendix I  <div style="text-align: right;">CIRCLE ANSWER</div>	YES	NO
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5 (a) DESCRIBE PURPOSE FOR WHICH MATERIAL WILL BE USED INCLUDING SPECIFIC CONDITIONS OR DISEASES TO BE DIAGNOSED OR TREATED (Use page 2 if necessary):

See item 7, AEC Form 313

(b) CHEMICAL FORM ADMINISTERED

See item 6, AEC Form 313

(c) DOSAGE SCHEDULE FOR EACH CONDITION TO BE DIAGNOSED OR TREATED:

See supplemental sheet to AEC Form 313

6 INVESTIGATIVE PROPOSAL FOR EXPERIMENTAL OR NON-ROUTINE USE IS APPENDED. (See Appendix F of AEC Licensing Guide for items to be submitted):  N/A	CIRCLE ANSWER	YES	NO
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7 IF BYPRODUCT MATERIAL WILL NOT BE OBTAINED IN PRECALIBRATED FORM FOR ORAL ADMINISTRATION OR IN PRECALIBRATED FORM FOR PARENTERAL ADMINISTRATION, DESCRIBE IDENTIFICATION, PROCESSING, AND STANDARDIZATION PROCEDURES:

N/A

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8 THE PROPOSED USE OF BYPRODUCT MATERIAL HAS BEEN, OR WILL BE, APPROVED BY THE MEDICAL ISOTOPE COMMITTEE	CIRCLE ANSWER	(YES)	NO
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**HOSPITAL FACILITIES FOR INDIVIDUAL PRACTICE USE ONLY**

9 (a) THE APPLICANT HAS COMPLETED ARRANGEMENTS FOR A HOSPITAL TO ADMIT RADIOACTIVE PATIENTS WHENEVER ADVISABLE	CIRCLE ANSWER	YES	NO
(b) A COPY OF INSTRUCTIONS TO BE FURNISHED TO THE HOSPITAL AS TO RADIOLOGICAL SAFETY PRECAUTIONS TO BE TAKEN AND AVAILABLE RADIATION INSTRUMENTATION IS ATTACHED	CIRCLE ANSWER	YES	NO