Form AEC-313 (2-73) 10 CFR 30

HERMANESTAN

D STATES ATOMIC ENERGY COMMISSION

APPLICATION FOR BYPRODUCT MATERIAL LICENSE

No a approved in April Burney No. 30-80027

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 filled with the Commission with respect to items 8 through 15 may be incorporated by reference provided references are clear and applications. Mail two copies to: U.S. Atomic Energy Commission, Washington, D.C., 20545, Attention: Materials Branch, Directorate or 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 License is subject to Title 10, Code of Federal Regulations, Part 20, and the License lee category should be stated in Item 16 and the appropriate tee enclosed. (See Note in Instruction Sheet).

(e) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital per- (b) STREET ADDRESS(ES) AT WHICH SYPRODUCT MATERIAL WILL BE USED. (II son, stc. Include ZIP Code and telephone number.) different from 1(a). Include ZP Code) Indiana University Bloomington, Indiana 47401 Same as previous application 3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license. 2. DEPARTMENT TO USE SYPRODUCT MATERIAL please indicate and give number Indiana University Academic Amendment to No. 13-00108-05 Departments, Bloomington Campus 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 floms 8 and 9.) 5. BADIATION PROTECTION OFFICER. (Name of person designated as radiation protect tion officer if other than individual user. Attach resume of his training and experience as in Homs & and 9.) Same as previous application Henry C. Briggs

6. (u) SYPRODUCT MATERIAL (Floments and moss number of each.)

Add the following:

Americium 241-Beryllium (b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLICURIES OF EACH CHEMICAL AND/OR PHYS-ICAL FORM THAT YOU WILL POSSESS AT ANY ONE TIME. (If sected source(s), also state name of manufacturer, model number, number of sources and maximum activity per source.)

Sealed source (Amersham-Searle AMN-175) 100 millicuries

7. DESCRIBE PURPOSE FOR WHICH SYPRODUCT 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 storage and/or used.)

Same as previous application

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Principles and practices of radiation protection Radioactivity measurement standardization and monitoring techniques and instruments Mathematics and calculations basic to the use and measurement of radioactivity		WHERE TRAINED					DURATION OF	ON THE JOB (Circle diswer)		FORMAL COURS (Circle enswer)		
								Y0.	No	Yes	No	
		Same as previous application						Yes No	Yes	No		
							You No	Yes No	No			
Biolog	ical offects of radiation								Yes	No	Yes	No
EXPER	ENCE WITH RADIATION	Actual	use of radiaisa	topes or equivale		rience.)			Dalla III			
SOTOPE	MAXIMUM AMOUNT	WH	ERE EXPENSENC	E WAS GAINED		DURATION	OF EXPE	RIENCE		TYPE O	or use	
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O. RADI	ATION DETECTION INSTRUM	ENTS		BADIATION	-	TIVITY BANGE	Twinn	W THICKNESS			use	
(Include mate and model number of each)		AVAILABLE	DETECTED	SENSI	(mr/hr)		mg/cm²)	(Manito		veying, me	muring)	
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