

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.) Williams Brothers Engineering Company Resource Sciences Center 321 South Boston Tulsa, Oklahoma 74103 | | (b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED (If different from 1 (a) Include ZIP Code.) 3300 West 21st Street Tulsa, Oklahoma 74107 | |
| 2. DEPARTMENT TO USE BYPRODUCT MATERIAL Fluid Dynamics Research Center | | 3. PREVIOUS LICENSE NUMBER(S) (If this is an application for renewal of a license, please indicate and give number.) Renewal of license number 35-13351-02 | |
| 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.) H. L. Lawler, Senior Research Engineer Glenn Cunningham, Staff Engineer | | 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.) H. L. Lawler | |
| 6. (a) BYPRODUCT MATERIAL (Elements and mass number of each.) A. Strontium 90----- B. Cesium 137----- C. Iron 59----- D. Cesium 137----- | | (b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLCURIES 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.) Sealed Source, Industrial Nucleonics Corp., two Model DH-3 measuring heads, each has 1000 millicuries. Sealed Source, Industrial Nucleonics Corp., two Model DH-5 measuring heads, each has 50 millicuries. To be deleted from license - never obtained. Sealed Source (3M Model 4F6S) used in Robertshaw Controls Company Model 770-C1 source holder for density measurement - source of 75 millicuries. | |

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, B and D. Sealed units used with measuring devices to determine densities of various slurry solutions pumped through experimental pipelines.

8510240240 850826
REGA LIC30 PDR
35-13351-01

U. S. GOVERNMENT PRINTING OFFICE: 1971 O - 424 845