

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.)		(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED (If different from 1 (a). Include ZIP Code.)	
Monsanto Industrial Chemicals Co. 800 N. Lindbergh Boulevard St. Louis, Missouri 63166		Monsanto Company, Carondelet Plant 8201 Idaho Avenue St. Louis, Missouri 63111	
2 DEPARTMENT TO USE BYPRODUCT MATERIAL Control Laboratory, Carondelet Plant and Research Dept., 800 N. Lindbergh St. Louis, Missouri 63166		3 PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.) 24-01113-07 (application for 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.) Dr. K. Y. Kim Mr. J. J. O'Leary		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.) Individual users	
6 (a) BYPRODUCT MATERIAL (Elements and mass number of each.) A. Calcium 45 - Phosphorus 32 B. Phosphorus 32 C. Bismuth 210		(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 30 millicuries B. Any 10 millicuries C. Sealed source 15.2 microcuries	
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. Determination of dentin abrasion B. Laboratory studies of materials C. Instrument calibration			

45677

(Continued on reverse side)

SUPPLEMENTAL INFORMATION TO APPLICATION

1. Sections 8, 9 of Form AEC 313:

Applies only to Dr. K. Y. Kim

For Joseph J. O'Leary - refer to letter dated
December 12, 1968 and
Amendment No. 9

2. Background of Dr. K. Y. Kim

a. Received a Ph.D. in Chemical Engineering from the
University of Wisconsin in 1959.

b. Have been working in the R. & D. Department of
Monsanto Industrial Chemicals Company since 1959.

c. Experience with radiation.

Determination of radioactive dentin abrasion using
irradiated teeth of P-32.

Radiation shielding with ferrophosphorus aggregate
brick using Co-60.

Radiotracer chemical work using C-14.

3. Sections 10 to 15 refer to Applications dated May 27,
1965; May 8, 1963; June 7, 1961.

45677