

Form AEC-313 8-64 10 CFR 30	UNITED STATES ATOMIC ENERGY COMMISSION APPLICATION FOR BYPRODUCT MATERIAL LICENSE	Form approved Budget Bureau No. 38-R027			
<p>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.</p>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>1. (a) NAME AND STREET ADDRESS OF APPLICANT (Institution, firm, hospital person, etc. Include ZIP Code.)</p> <p>Monsanto Company Carondelet Plant 8201 Idaho Ave., St. Louis, Mo. 63111</p> </div> </td> <td style="width: 50%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED (If different from 1 (a). Include ZIP Code.)</p> <p>N.A.</p> </div> </td> </tr> </table>			<div style="border: 1px solid black; padding: 5px;"> <p>1. (a) NAME AND STREET ADDRESS OF APPLICANT (Institution, firm, hospital person, etc. Include ZIP Code.)</p> <p>Monsanto Company Carondelet Plant 8201 Idaho Ave., St. Louis, Mo. 63111</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED (If different from 1 (a). Include ZIP Code.)</p> <p>N.A.</p> </div>	
<div style="border: 1px solid black; padding: 5px;"> <p>1. (a) NAME AND STREET ADDRESS OF APPLICANT (Institution, firm, hospital person, etc. Include ZIP Code.)</p> <p>Monsanto Company Carondelet Plant 8201 Idaho Ave., St. Louis, Mo. 63111</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED (If different from 1 (a). Include ZIP Code.)</p> <p>N.A.</p> </div>				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>2. DEPARTMENT TO USE BYPRODUCT MATERIAL</p> <p>Dicalcium Phosphate Production Department</p> </div> </td> <td style="width: 50%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)</p> <p>24-1113-13 (A: 7), with Amendments 1, 2, 3, 4, and 5</p> </div> </td> </tr> </table>			<div style="border: 1px solid black; padding: 5px;"> <p>2. DEPARTMENT TO USE BYPRODUCT MATERIAL</p> <p>Dicalcium Phosphate Production Department</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)</p> <p>24-1113-13 (A: 7), with Amendments 1, 2, 3, 4, and 5</p> </div>	
<div style="border: 1px solid black; padding: 5px;"> <p>2. DEPARTMENT TO USE BYPRODUCT MATERIAL</p> <p>Dicalcium Phosphate Production Department</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)</p> <p>24-1113-13 (A: 7), with Amendments 1, 2, 3, 4, and 5</p> </div>				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>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.)</p> <p>W. S. Henderson, Maint. Supv. N. L. Marsh, Maint. Superintendent</p> </div> </td> <td style="width: 50%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>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.)</p> <p>N. L. Marsh</p> </div> </td> </tr> </table>			<div style="border: 1px solid black; padding: 5px;"> <p>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.)</p> <p>W. S. Henderson, Maint. Supv. N. L. Marsh, Maint. Superintendent</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>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.)</p> <p>N. L. Marsh</p> </div>	
<div style="border: 1px solid black; padding: 5px;"> <p>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.)</p> <p>W. S. Henderson, Maint. Supv. N. L. Marsh, Maint. Superintendent</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>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.)</p> <p>N. L. Marsh</p> </div>				
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.)</p> <p>Cesium-137</p> </div> </td> <td style="width: 33%; border: none; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px;"> <p>(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.)</p> <p>1 sealed source 35 millicuries each 35 millicuries total Ohmart Dwg. A-5771</p> </div> </td> <td style="width: 33%; border: none;"></td> </tr> </table>			<div style="border: 1px solid black; padding: 5px;"> <p>6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.)</p> <p>Cesium-137</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>(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.)</p> <p>1 sealed source 35 millicuries each 35 millicuries total Ohmart Dwg. A-5771</p> </div>	
<div style="border: 1px solid black; padding: 5px;"> <p>6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.)</p> <p>Cesium-137</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>(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.)</p> <p>1 sealed source 35 millicuries each 35 millicuries total Ohmart Dwg. A-5771</p> </div>				
<div style="border: 1px solid black; padding: 5px;"> <p>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.)</p> <p style="text-align: center; margin-top: 20px;">Ohmart Model BWV Nuclear Weigh Scale to measure mass flow. Sealed source contained in Ohmart Model SHRM source holder</p> </div>					

04132

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	By Ohmart engineer at time of installation of scale	2-3 days	(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
		Instruction on operation of gage and leak test procedure on source holder by Ohmart engineer at time of installation. Wipe test service contract in effect since 1963.		

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)
NONE REQUIRED					

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

NONE REQUIRED

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

NONE REQUIRED

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	NONE REQUIRED
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 ATTACHED SHEET
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 ATTACHED SHEET

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 20, AND THAT ALL INFORMATION CONTAINED HEREIN, INCLUDING ANY SUPPLEMENTS ATTACHED HERETO, IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

Date July 17, 1968

By N. L. Marsh
Maintenance Superintendent
Title of certifying official

MONSANTO COMPANY
Applicant named in item 1