

NRC Form 313 I (12-81) 10 CFR 30		U.S. NUCLEAR REGULATORY COMMISSION		1. APPLICATION FOR: <i>(Check and/or complete as appropriate)</i>	
APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL				<input checked="" type="checkbox"/>	a. NEW LICENSE
<i>See attached instructions for details.</i> <i>Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.</i>				<input type="checkbox"/>	b. AMENDMENT TO: LICENSE NUMBER
				<input type="checkbox"/>	c. RENEWAL OF: LICENSE NUMBER
2. APPLICANT'S NAME <i>(Institution, firm, person, etc.)</i> National Starch & Chemical Corp. TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION 217-584-1323			3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION Vernon Rose TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION Same		
4. APPLICANT'S MAILING ADDRESS <i>(Include Zip Code)</i> <i>(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)</i> Box 197, Meredosia, IL 62665			5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED <i>(Include Zip Code)</i> Same		
(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)					
6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL <i>(See Items 16 and 17 for required training and experience of each individual named below)</i>					
FULL NAME			TITLE		
a. Vernon Rose			Plant Engineer		
b.					
c.					
7. RADIATION PROTECTION OFFICER Vernon Rose			<i>Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.</i>		
8. LICENSED MATERIAL					
LINE NO.	ELEMENT AND MASS NUMBER A	CHEMICAL AND/OR PHYSICAL FORM B	NAME OF MANUFACTURER AND MODEL NUMBER <i>(If Sealed Source)</i> C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D	
(1)	CS 137	Ohmart Corporation device listed on Ohmart license No. 34-00639-01, Amendment No. 27			
(2)				<i>App. 3000</i> <i>2000.8926.420</i> <i>Check No. 200.728.8</i> <i>Amount/Fee Ch. 1104</i> <i>Type of Fee Application (3P)</i> <i>Date Check Rec'd 3/9/85</i> <i>Received By J. A. Chorn</i>	
(3)					
(4)					
DESCRIBE USE OF LICENSED MATERIAL E					
(1)	To be used in Ohmart SHD Source holder to measure level of radioactive material				
(2)					
(3)	<div style="display: flex; justify-content: space-between;"> <div> 8506050316 850510 REG3 LIC30 12-24475-01 </div> <div> PDR </div> </div>				
(4)	<div style="display: flex; justify-content: space-between;"> <div> 8506050316 850510 REG3 LIC30 12-24475-01 </div> <div> PDR </div> </div>				

9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)	Source Holder	Ohmart	
(2)			
(3)			
(4)			

10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	None required by user. The	Ohmart Corporation	will	provide	a Field	Service
(2)	Representative to do initial	and ongoing	tests required,	using proper		
(3)	instrumentation.					
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY Not applicable	<input type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments. Not applicable
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12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input type="checkbox"/> (1) FILM BADGE <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____ Not applicable	None required by user. Radiation does not exceed 5 mr/hr. at one (1) foot from gage outline and 100 mr/hr. field is not present.	<input type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input type="checkbox"/> OTHER (Specify): _____ Not Applicable

13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

- ☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC.
☐ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC.
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC. Not applicable

14. WASTE DISPOSAL

- a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED
Complete as shown on attached by-product material license attachment.
- b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

Complete as shown on attached by-product material license attachment.

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.
16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
 - a. Principles and practices of radiation protection.
 - b. Radioactivity measurement standardization and monitoring techniques and instruments.
 - c. Mathematics and calculations basic to the use and measurement of radioactivity.
 - d. Biological effects of radiation.
17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

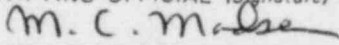
On the job training by Ohmart Field Service Representative during start-up given to Radiation Protection Officer.

18. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, 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.

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.

a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170)	b. CERTIFYING OFFICIAL (Signature) 
\$110.00	c. NAME (Type or print) M.C. MADSEW
(1) LICENSE FEE CATEGORY: 3P	d. TITLE PLT MGR
(2) LICENSE FEE ENCLOSED: \$	e. DATE 3/14/85

WASTE DISPOSAL/BYPRODUCT MATERIAL

Whenever the source holder is no longer needed it will be either

1. Removed and stored in a locked cupboard or room properly labeled. It will not be replaced in service without prior wipe testing, or
2. Removed and returned to the manufacturer for disposal.

In either case, the services of the manufacturer's representative will be obtained to supervise removal, reinstallation, and/or packaging for return to the manufacturer.

RADIATION PROTECTION PROGRAM

The source holders will be received and stored pending arrival of Manufacturer's Field Engineer. The source holders will be installed in the closed position under the supervision of the representative. A written procedure for prevention of entry into the vessel when the source is in the open (source exposed) position will be prepared. This program will be developed in consultation with the manufacturer's representative.

The initial radiation survey will be made by the representative at the time the device is placed in service. An occupancy evaluation will be made by the representative and if film badges appear to be required, they will be obtained. Form NRC-3 will be posted and if the radiation survey with the vessel(s) empty reveals radiation fields in excess of 5 mr/hr. at 12 inches from the surface of the vessels, appropriate warning signs will be posted. Procedures will be adjusted to reduce the total dose to personnel to the minimum reasonably achievable. A copy of the radiation survey and written procedures will be kept on file for future reference.

In case of malfunction of the source holder or damage thereto, the services of the manufacturer's representative will be obtained for repair or to supervise removal and proper packaging for return to the manufacturer for repair or replacement as required.

In case of emergency such as fire or explosion involving apparent damage to the source holder, the appropriate Regional Office of Inspection and Enforcement (10 CFR 20 Appendix D), USNR, will be contacted for assistance. The area around the source holder will be barricaded. The services of a manufacturer's representative will be obtained to assist in inspection for damage and local health authorities will also be notified.

WIPE TEST PROCEDURE - A test will be performed on the surface of the source holder at the appropriate interval by the licensee in accordance with the instructions of the manufacturer's representative and contained in the gage instruction manual. The wipe test kit to be used is the Ohmart Model LT and the wipe will be evaluated for leakage by The Ohmart Corporation. Should the presence of 0.005 microcuries of removable contamination be detected, the source holder will be withdrawn from service, the Regional Office of the USNRC notified and the device repaired or replaced by the manufacturer.