

1. APPLICATION FOR:
(Check and/or complete as appropriate)APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL☒ a. NEW LICENSEb. AMENDMENT TO:
LICENSE NUMBERc. RENEWAL OF:
LICENSE NUMBER

See attached instructions for details.

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.

2. APPLICANT'S NAME (Institution, firm, person, etc.)

UNITED CONVEYOR CORPORATION

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
312-948-0400

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

K. B. Wagner/R. W. Kuby

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
312-948-0400

4. APPLICANT'S MAILING ADDRESS (Include Zip Code)

300 Wilnot Road
Deerfield, Illinois 600155. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED
(Include Zip Code) and temporary use in all300 Wilnot Road states under NRC juris-
Deerfield, Illinois 60015 diction

(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
(See Items 16 and 17 for required training and experience of each individual named below)

FULL NAME

TITLE

a. KENNETH B. WEGNER

PROJECT ENGINEER

b. ROBERT W. KUBY

PROJECT ENGINEER

c.

7. RADIATION PROTECTION OFFICER

Kenneth B. Wagner, Project Engineer
Robert W. Kuby, Project Engineer

Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.

8. LICENSED MATERIAL

L I N E NO.	ELEMENT AND MASS NUMBER A	CHEMICAL AND/OR PHYSICAL FORM B	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source) 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	Sealed	Texas Nuclear Model 570-57157C	One x 100 millicuries
(2)				
(3)				
(4)				

DESCRIBE USE OF LICENSED MATERIAL
E

See Attachment 8 E

(1)

(2)

(3)

(4)

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)	One (1) Source Holder	Texas Nuclear	5190
(2)	Note: The source holder is a complete	storage container for the	source, both
(3)	prior and subsequent to installation of the gauge.		
(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)	No Radiation detection instrumentation is necessary to safely possess and					
(2)	utilize this device.					
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY None Required	<input type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments. None Required
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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): <u>None Required</u> <u>(See Attachment)</u>		<input type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input type="checkbox"/> OTHER (Specify): _____

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

<input type="checkbox"/> a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC. <input type="checkbox"/> b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC. <input type="checkbox"/> c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC. <input type="checkbox"/> d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.	Not Applicable
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14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED
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.
No waste disposal is involved. In the event that the gauge is damaged or its use discontinued, we shall notify Texas Nuclear for removal and return the gauge for repair or disposal of the source material.

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:

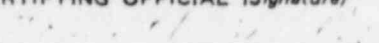
15. **RADIATION PROTECTION PROGRAM.** Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (*if needed*), day-to-day general safety instruction to be followed, 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.

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.

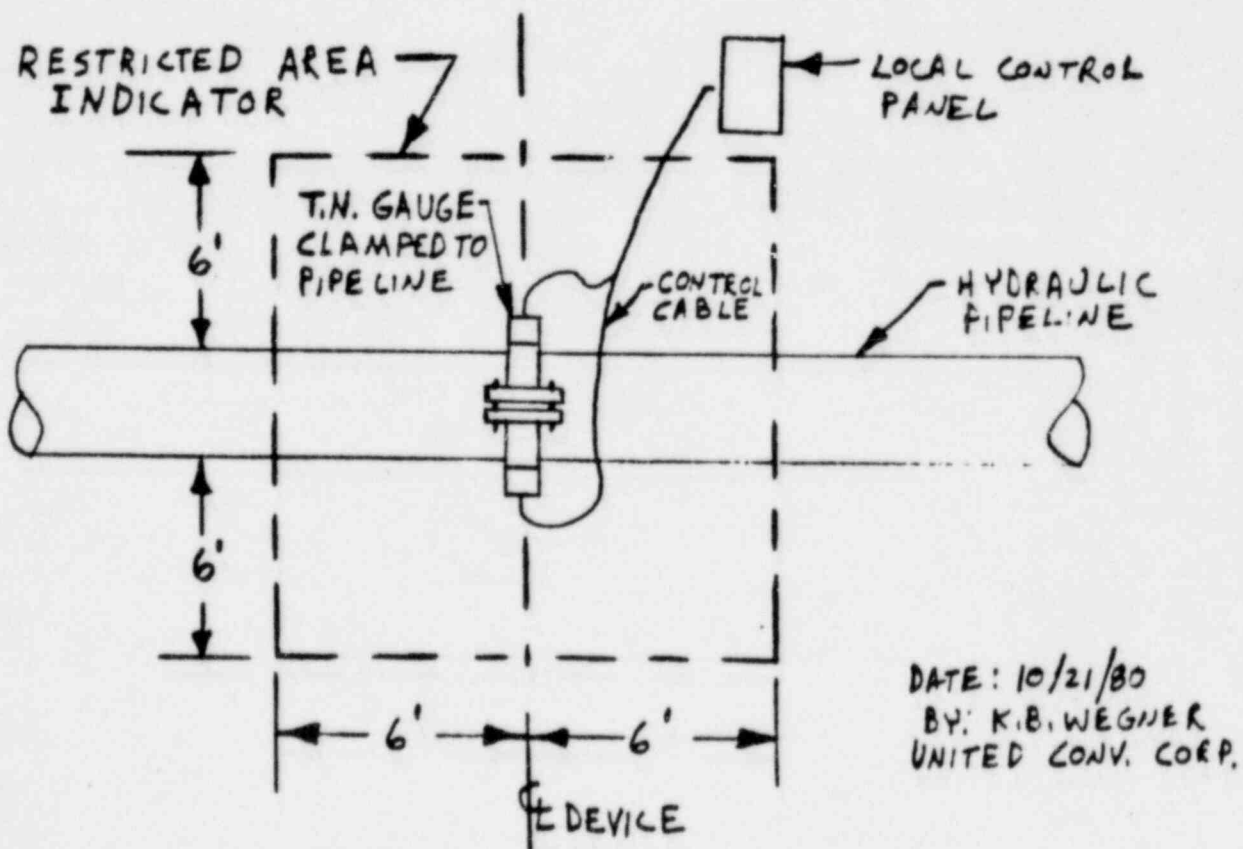
a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170) \$110.00	b. CERTIFYING OFFICIAL (Signature) 
(1) LICENSE FEE CATEGORY: 3L	c. NAME (Type or print) KENNETH A. WEGNER
(2) LICENSE FEE ENCLOSED: \$ 110.00	d. TITLE PROJECT ENGINEER e. DATE 10/21/80

ATTACHMENT 8 E

The device will be used for laboratory and field testing of material flow rates through hydraulic pipe lines. The device will be attached to a section of pipe (and removed) by the manufacturer's representative.

The location of the device will be in an area out of the mainstream of plant personnel involvement. The immediate area surrounding the device will be zoned off limits in accordance with plant safety procedures for a minimum of six feet in all directions of accessibility (platforms and walkways). See sketch below.

There are no severe environmental conditions that can affect the integrity of the source and shielding. All environmental factors have been presented to the manufacturer for evaluation prior to specifying these devices.



CONTROL NO. 86155 INSTALLATION SKETCH

ATTACHMENT 12 A

No additional personnel monitoring devices need be utilized due to the presence of these gauging devices. The source holder(s) are designed such that radiation levels will be less than 5mR/h one foot from any accessible surface at the maximum source loading for the device with the device in the OFF position. When these devices are installed in their designed configuration on the pipes and the shutter(s) opened, the radiation levels will still be less than 5 mR/h one foot from any accessible surface. It is not likely, when consideration is given to the totally enclosed radiation beam area and to the precautions given below, that any individual will receive a radiation exposure in excess of 0.125 rem per calendar quarter.

ATTACHMENT 15

RADIATION PROTECTION PROGRAM

Based upon working conditions and physical accessibility, we estimate that no persons would routinely be within three feet of any of these devices one hour per week.

Our personnel will be instructed that they are not to remove the source holder under any circumstances. There is no access to the beam area as long as the source holder is installed.

Texas Nuclear personnel will perform the initial radiation survey and leak testing at the time of installation. Additionally, our personnel will receive specific training at the time of installation. This training will include construction features of the device, source integrity, beam geometry and intensity and operating details of the device. Any precautionary steps like the addition of shielding, signs, or precautions to be taken will be covered at the time in accordance with Texas Nuclear installation procedures and training.

The source holder (Model 5190) will be tested for source integrity at least once every three years. Leak testing will be performed by Texas Nuclear Procedure QT/1K.

In the event some catastrophic emergency occurs and this device may be involved, we will notify Texas Nuclear and await further instructions.

Any repair, relocation or removal of the source holder(s) will be done by Texas Nuclear personnel.

ATTACHMENT 16

FORMAL TRAINING IN RADIATION SAFETY

The manufacturer will furnish us with detailed instructions on the proper precautions to be taken in utilizing these devices. Specific items of design detail, shutter operation, beam geometry, radiation levels and regulatory compliance will be presented by trained personnel of Texas Nuclear at the time these devices are installed.

ATTACHMENT 17

EXPERIENCE

See detail presented in Attachment 16 (Formal Training in Radiation Safety).