

APPLICATION FOR BYPRODUCT MATERIAL LICENSE  
INDUSTRIAL

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.

a. NEW LICENSE

b. AMENDMENT TO:  
LICENSE NUMBER

03120

c. RENEWAL OF:  
LICENSE NUMBER

1 + 19344

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

ORDERS CONSTRUCTION CO., INC.

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION

768-0038 304

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

John R. Jones

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION

768-0038 304

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

P. O. Box 467  
St. Albans, WV 25177

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED  
(Include Zip Code)

6416 McCorkle Ave.  
St. Albans, WV 25177  
and Temporary Job Sites

(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. John R. Jones

RECEIVED BY LFMB

Engineer

b.

Date APR 31 1980

Applicant...  
Check No. 023693

c.

Log GPA PG 2 H.L.

Amount/Fee \$110.34

7. RADIATION PROTECTION OFFICER

Orig. To...  
Action Compl. 4/3/80

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

John R. Jones

Date Check APR 30 1980  
Received By P. Jones

8. LICENSED MATERIAL

L I N E  NO.	ELEMEN T 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 Source	Troxler Drawing # 102112	No Source to exceed 9 mCi
(2)	Am 241	Sealed Source	Troxler Drawing # 102451	No Source to exceed 40 mCi
(3)				
(4)				

DESCRIBE USE OF LICENSED MATERIAL  
E

(1) For used in Troxler 3400 series Moisture-Density guage to measure  
(2) properties of construction materials.

(3) 03266

(4) COPIES SENT TO OFF. OF  
INSPECTION AND ENFORCEMENT

## 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)	Moisture Density Guage	Troxler Electronics	3400 series
(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					
(2)						
(3)						
(4)						

## 11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☐ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

N/A

☐ b. CALIBRATED BY APPLICANT

Attach a separate sheet describing method, frequency and standards used for calibrating instruments.

## 12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A.	SUPPLIER (Service Company) B.	EXCHANGE FREQUENCY C.
<input checked="" type="checkbox"/> (1) FILM BADGE <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____	R. S. Landauer, Jr. Co. Glenwood Science Park Glenwood, Illinois 60425  (312) 755-7000	<input checked="" 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).)

- ☐ 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. See attached schetch.  
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

## 14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

Sources will be returned to manufacturer.

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.

# 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:

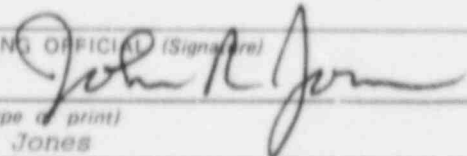
15. **RADIATION PROTECTION PROGRAM.** Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, 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)  Application: \$110.00	b. CERTIFYING OFFICIAL (Signature) 
(1) LICENSE FEE CATEGORY: Category 2.45	c. NAME (Type or print) John R. Jones
(2) LICENSE FEE ENCLOSED: \$110.00	d. TITLE Engineer  e. DATE 3/10/80

RECEIVED

03256



# Orders Construction Company, Inc.

6416 MACCORKLE AVENUE, S. W. - POST OFFICE BOX 467

ST. ALBANS, WEST VIRGINIA 25177

PHONE 304 768-0038

ROBERT O. ORDERS  
304 727-9587

## RADIATION PROTECTION PROGRAM

### 15. A. RADIATION PROTECTION OFFICER

His duties shall include

- 1) Assure safe use of the guages.
- 2) Assure compliance with the requirements of Title 10 CRF Parts 19, 20, 30, or applicable state regulations, and all applicable US DOT regulations.
- 3) Assure byproduct materials possessed under the license conform to materials listed on the license.
- 4) Assure that use of devices (particularly in the field) is only by persons named as users under the license or persons who have completed acceptable training.
- 5) Assure all users wear personnel monitoring while using guages.
- 6) Assure guages are properly secured against unauthorized removal at all times.
- 7) To serve as point of contact and give assistance in case of emergency - to insure all proper authorities are notified promptly in case of accidents.
- 8) Assure that terms and conditions of the license are met such as:
  - a) Periodic leak test are performed.
  - b) All required records are kept and reviewed periodically for compliance with regulations - these include source certificate leak test records, personal exposure records, and transfer or radioactive materials.

### 15. B. HANDLING PROCEDURES

- 1) Do not operate or attempt to operate the instrument unless you have been authorized to do so.
- 2) Keep the source position in the "SAFE" or stored position when not in use.
- 3) Wear a film badge when using or transporting the instrument.
- 4) While exposure dose levels are well within limits for radiation workers, never expose yourself to the bare source without sufficient reason for justification of the additional dose.

*per call, he will use Tropic 3280 leak test kit.*

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- 5) Keep all unauthorized persons out of the operating area. A suggested distance is 5 meters or 15 feet. The general public must not be unnecessarily exposed to radiation.
- 6) Maintain security of the instrument at all times. The source lock should be in place when not in use and the instrument should be kept in a locked vehicle when transported. When stored, the area should be locked. Not only is it an expensive piece of equipment but, if stolen, could be abandoned under conditions which could be hazardous.
- 7) The operator should follow standard operating procedures and report any that he feels are unsafe.
- 8) Insure that the gauge has had leak tests performed at the intervals required by Radioactive Materials License.
- 9) If you have any doubts about use of the instrument, ASK. Your Radiological Safety Officer either has the answer or can obtain one.

#### C. SECURITY

Locks shall be maintained to prevent accidental exposure of a sealed source when not under the direct supervision of approved personnel. In addition, storage containers shall be physically secured to prevent tampering or removal by unauthorized personnel.

#### D. PERSONNEL MONITORING

No person shall use this equipment unless at all times the user is in the possession of a film badge.

#### E. RECORDS AND REPORTS

- 1) A quarterly physical inventory will be conducted to account for all sealed sources received and possessed under license. The inventory record will be maintained for inspection.
- 2) All sealed sources will be leak tested as required. When transferred in the absence of a leak test certificate, the source shall not be put into use until tested.
- 3) Reports from film badge service will be maintained for inspection.
- 4) When an individual terminates employment, a record of his total received dose must be made available to the employee.

#### F. INCIDENTS

- 1) Any theft or loss of licensed material shall be reported by telephone or telegram to the appropriate agency, including the appropriate state agency. Within 30 days after the loss, a written report will be filed giving detailed description of the source, circumstances of the loss, statement of disposition, possible radiation exposure or hazard, actions taken to recover the source, and procedures which will be implemented to prevent a recurrence of the loss or theft.
- 2) The licensee must report any overexposure of operators which exceeds the limits given in 10 CFR part 20, detailing circumstances of the exposure and possible injury.

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## G. HANDLING AND EMERGENCY PROCEDURES

- 1) No personnel may transport or use the nuclear gauges unless the individual has been approved by the radiological safety officer and the requirements of these procedures are met.
- 2) Each user must demonstrate their ability to correctly and safely use the nuclear gauge.
- 3) At the termination of each field use, the nuclear gauge will be transferred to its regular storage area.
- 4) In the event of physical damage to a gauge, a six (6) feet radius exclusion area shall be maintained until the extent of source damage (if any) is determined. If a vehicle is involved, it must be stopped and remain stopped until the extent of contamination hazard (if any) is determined. If visual examination of the instrument and source indicates damage of the source, including fracture of the weld the appropriate authorities and Troxler Electronic Laboratories, Inc. will be notified. The instrument may be removed from the site by using a shovel or other long handled instrument and placed in a suitable container such as a metal drum. Provisions should be made to have the site surveyed for possible contamination after the instrument is removed. Disposition by the factory, could be arranged after the leak test had been performed to determine the integrity of the source before shipment back to the factory.
- 5) Immediate telephone notification must be made to the following in the event of accident (4 above) or the loss of a sealed source, whether accidental or due to theft.
  - A. Company Radiological Safety Officer, John R. Jones
  - B. NCR Regional Office if applicable
  - C. State Health Department
  - D. Local Authorities
 

Fire dept., sheriff, police, state highway patrol, if necessary.
  - E. Troxler Electronic Laboratories, if necessary.

## H. TRANSPORT BY PRIVATE MOTOR VEHICLE

The equipment, in its container, may be transported by motor vehicle under the "Yellow II" label without placarding the vehicle as required by 49 CFR 177.823.

The lock should be in place and the container placed in a portion of the vehicle which can be locked. When not in transit the equipment should be stored in a secured area.

Since the container has a Transport Index of 0.1 or greater it may not be stored less than 30 centimeters from passengers per 49 CFR 174.586. It also should not be stored for more than 8 hours at less than 1 meter from undeveloped film.



16. TRAINING

John R. Jones

- 1) Troxler Electronic Labs, Inc.  
2 day Training Course (scheduled April 1980)
- 2) Contractors Assoc. of W. Va. and W. Va. Dept. of Highways.  
4 day Nuclear Compaction Technician Refresher Course.

17. WORK EXPERIENCE

None

✓



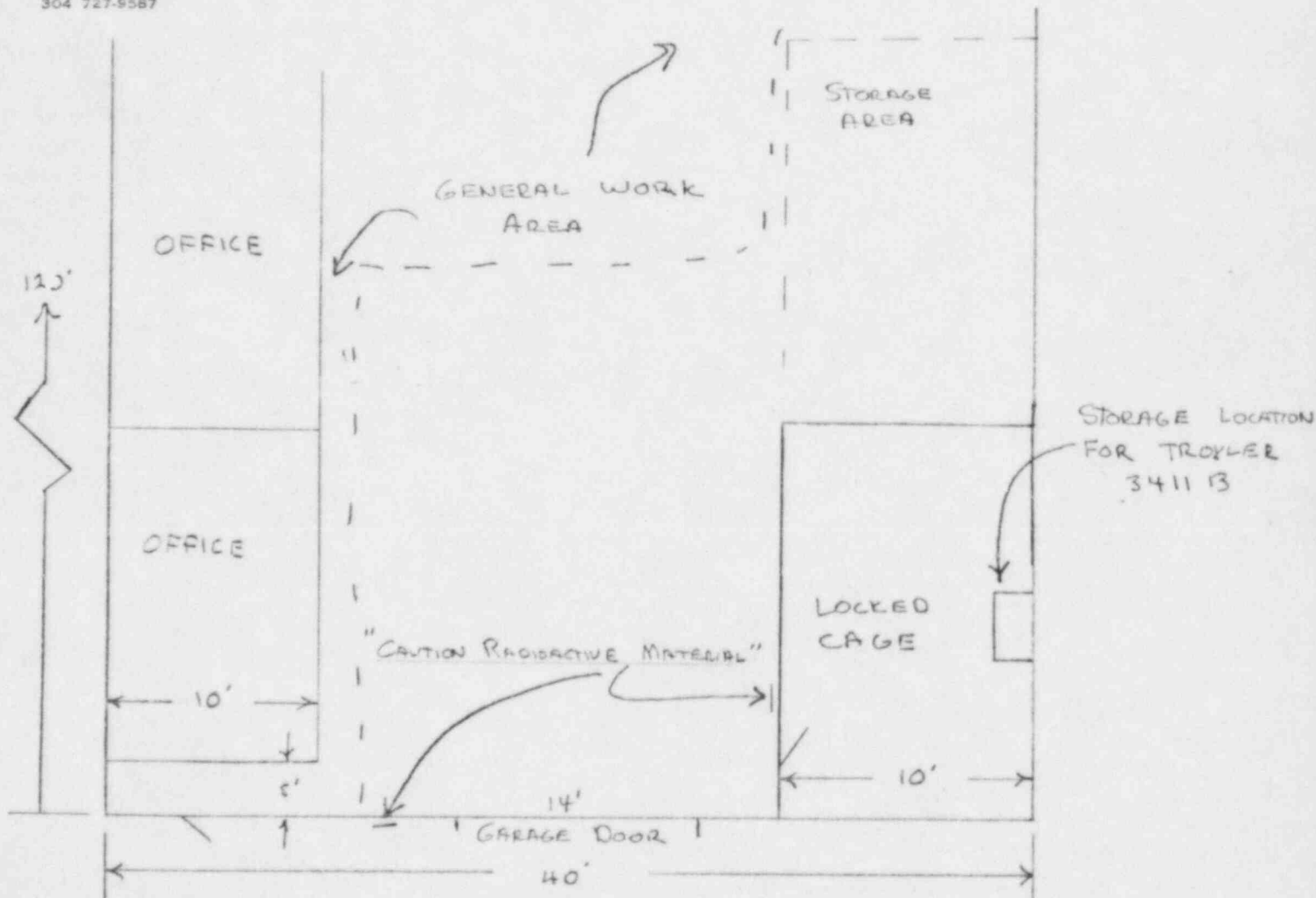
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PHONE 304 768-0038

ROBERT O. ORDERS  
304 727-9587



SKETCH SHOWING LOCATION OF STORAGE  
AREA FOR TROYLER 3411 B

ORDERS CONSTRUCTION CO. INC.  
SHOP  
WRIGHT ROAD  
POCA, WVA

3-1-80

NO SCALE

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