NRC Form 313 I (12-81) 10 CFR 30

U.S. NUCLEAR REGULATORY COMMISSION

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.

1. APPLICATION FOR: *(Check and/or complete as appropriate)*

- a. NEW LICENSE
- b. AMENDMENT TO: LICENSE NUMBER
- c. RENEWAL OF: LICENSE NUMBER — X — 47-17494-01

2. APPLICANT'S NAME *(Institution, firm, person, etc.)*
Consolidation Coal Company

TELEPHONE NUMBER: AREA CODE – NUMBER EXTENSION
(304) 296-3461

3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION
Gary K. Clayton

TELEPHONE NUMBER: AREA CODE – NUMBER EXTENSION
(304) 296-3461 Ext. 338

4. APPLICANT'S MAILING ADDRESS *(Include Zip Code)*
(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)
P. O. Box 1314
Morgantown, WV 26507-1314

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED *(Include Zip Code)*
Temporary job sites of applicant in Pennsylvania and West Virginia.

(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
	Pat Danser	Technician
a.	Ray M. Henderson	Reg. Mgr. Engineering & Environmental Affairs
	Ruben R. Mick	Technician
b.	Roger B. Alke	Supervisor, Design and Construction
	Gary K. Clayton	Civil Engineer
c.	Robert J. Roupe	Technician

7. RADIATION PROTECTION OFFICER
Gary K. Clayton

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

LINE NO.	A ELEMENT AND MASS NUMBER	B CHEMICAL AND/OR PHYSICAL FORM	C NAME OF MANUFACTURER AND MODEL NUMBER *(If Sealed Source)*	D MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
(1)	Americium 2410	Sealed source	Troxler Laboratories CAA-741	40 mci
(2)	Cesium 137	Sealed source	Troxler Laboratories CC 1717	8.7 mci
(3)				
(4)				

	E DESCRIBE USE OF LICENSED MATERIAL
(1)	Troxler Model 3411 Moisture Density Gauge Serial Number 4563
(2)	Troxler Model 3411 Moisture Density Gauge Serial Number 4563
(3)	
(4)	

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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 Gauge	Troxler Laboratories	3411
(2)	Moisture Density Gauge	Troxler Laboratories	3411
(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)	N/A					
(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
X ☐ (1) FILM BADGE ☐ (2) THERMOLUMINESCENCE DOSIMETER (TLD) ☐ (3) OTHER (Specify): _____	R. S. Landauer, Jr. Company Glenwood Science Park Glenwood, Illinois 60425	X ☐ MONTHLY ☐ QUARTERLY ☐ OTHER (Specify):

13. FACILITIES AND EQUIPMENT (Check were 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. See attached

☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.

☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

N/A

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.

N/A

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.

Applicant.....
Check No. 4565
Amount/Fee Category $110.3L
Type of Fee Renewal
Date Check Rec'd 6/25/82
Received By Jacques

RECEIVED
Date 6/25/82
Log June-4
By Jacques
Trig. To.....
tion Compl.....

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)* Ray M Henderson
	c. NAME *(Type or print)* Ray M. Henderson
(1) LICENSE FEE CATEGORY: 3L	d. TITLE Reg. Mgr. Engineering & Environmental Affairs
(2) LICENSE FEE ENCLOSED: $ 110.00	e. DATE

RECEIVED JUN 21 1982 U.S. Nuclear Regulatory Commission RMSS Mail Section

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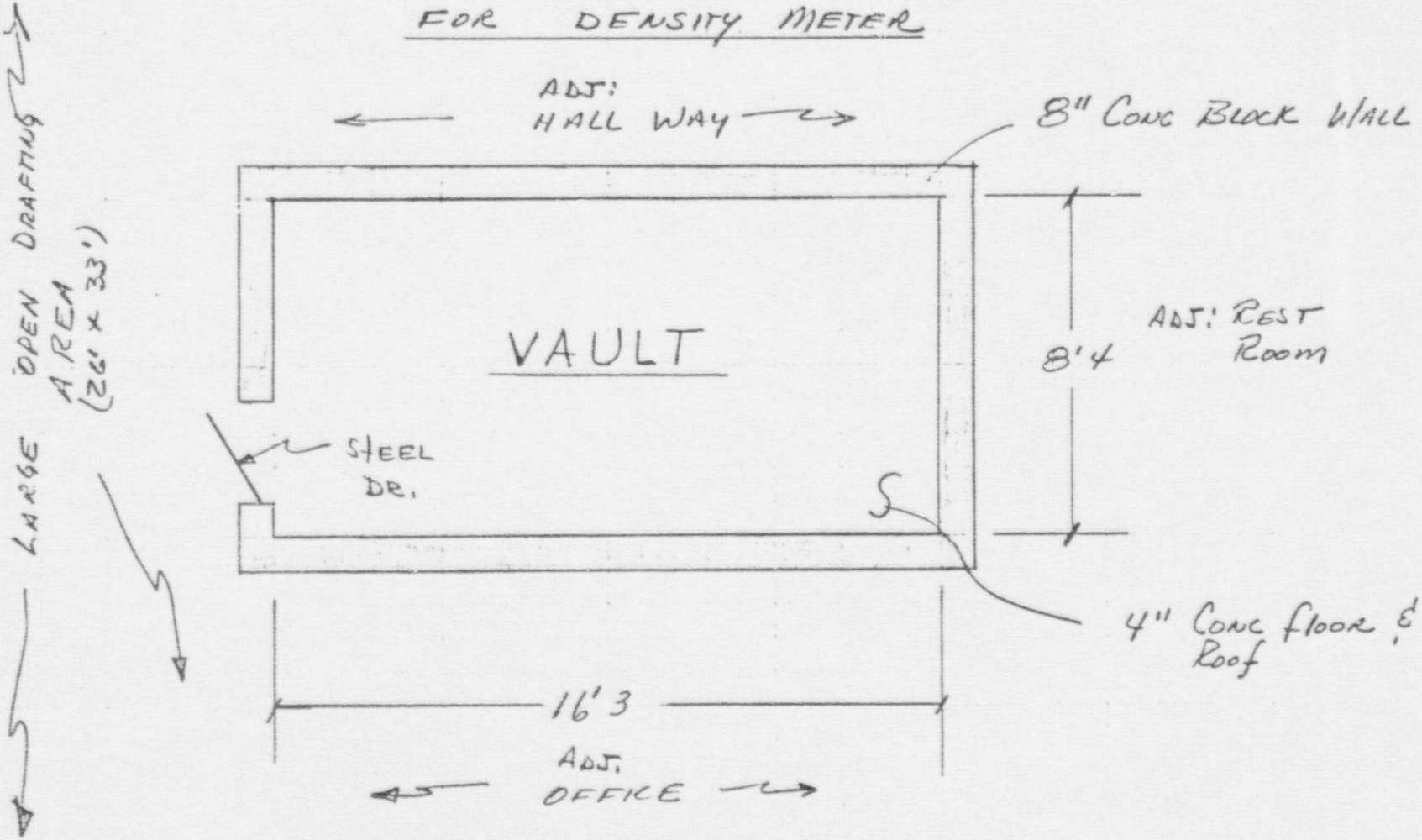
STORAGE AREA

FOR DENSITY METER



VAULT ON FIRST FLOOR OF TWO STORY BUILDING

LOCATION: NORTHERN W. VA. REGION
CONSOLIDATION COAL CO.
INTERSECTION US 119 & 48
SOUTH OF MORGANTOWN W. VA

15

RADIATION PROTECTION PROGRAM
FOR INDIVIDUAL USERS

A. HANDLING PROCEDURES

The Troxler instruments are designed with operator safety as a prime consideration: however, as with any piece of potentially hazardous equipment, some general precautions should be observed.

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 or other dose measurement device 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.

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 to be in place when not in use and the instrument should be kept in a locked vehicle when transported. When stored, the area is to be locked.

7. Insure that the gauge has had leak test measurements at the proper intervals as required by your Radioactive Materials License. Leak test conducted with Troxler RK-1 Leak Test Kit.

8. If you have any doubts about use of the instrument, ASK. Your Radiological Safety Officer either has the answer or can obtain one.

B. SECURITY

Regulations require that locks be maintained on radiographic equipment 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.

C. PERSONNEL MONITORING

The licensee shall not permit any person to use this equipment unless at all times the user is in the possession of a film

badge dosimeter. Film badge reports shall be maintained for inspection.

The film badge requirement may be waived upon application by the licensee if it can be demonstrated that the waiver is authorized by law and will not result in undue hazard to life or property.

D. RECORDS AND REPORTS

1. Each licensee shall conduct a quarterly physical inventory to account for all sealed sources received and possessed under his license. The record shall be maintained for inspection.

2. Each licensee shall have all sealed sources leak tested at intervals not to exceed six months. In the absence of a certificate, the source shall not be put into use until tested.

3. Reports from film badge service shall be maintained for inspection.

4. When an individual terminates employment with a licensee, a record of his total received dose must be made available to the employee.

E. INCIDENTS

1. The licensee must report any theft or loss of licensed material by telephone or telegram to the appropriate agency, including the appropriate state agency. Within 30 days after the loss, a written report must be filed giving detailed description of the source, circumstances of the loss, statement of disposition, possible radiation exposures 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 will report any overexposure of operators which exceeds the limits given in 10 CFR part 20, detailing circumstances of the exposure and possible injury.

F. 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 the gauge, a six (6) feet radius exclusion area will be maintained until the extent of source damage (if any) is determined. If a vehicle is in-

volved, it will be stopped and remain stopped until the extent of contamination hazard (if any) is determined. If visual examination of the instrument and source rod indicated damage to the source rod tip, including fracture of the tip or weld, you should notify the Department of Health and Troxler Electronic Laboratories, Inc. and keep personnel clear of the instrument. You should remove the instrument from the site by using a shovel or other long handled instrument and place it in a suitable container such as a metal drum. You should make provision to have the site surveyed after the removal of the instrument to determine if a breakage had occurred. Disposition by the factory, as covered later, would be arranged after a leak test had been performed to determine the integrity of the source before transport back to the factory.

5. Immediate telephone notification will 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. Gary K. Clayton , Radiological Officer

   B. Monongalia County Sheriff

   C. West Virginia State Police

   D. West Virginia State Health Department

G. TRANSPORT BY PRIVATE MOTOR VEHICLE

This instrument, 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 source rod lock should be in place and the container placed in a portion of the vehicle which can be locked. When not in transit the instrument 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.

H. It is the responsibility of the gauge owner to obtain copies of regulations which apply to his situation and comply with them.

All individuals listed in Item #6 have received the two day formal training course as presented by Troxler Electronic Labs, Inc., which includes training in: a) Principles and Practice of Radiation Protection, b) Radioacitvity Measurement Standardization and Monitoring Techniques and Instruments, c) Mathematics and Calculations Basic to the Use and Measurement of Radioactivity, d) Biological Effects of Radiation.

Gary K. Clayton has also attended a five day course in basic radif officer training covering fallout prediction and monitoring, fallout shelter management.

Experience - This consists of running field test with a Troxler Density Gauge which utilizes 40 mci Americium 241 and 8.7 mci Cesium 137.