

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

X a. NEW LICENSE

b. AMENDMENT TO:
LICENSE NUMBER

c. RENEWAL OF:
LICENSE NUMBER

L & L 19077

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.)

Monongahela Power Company

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
665-2931 304

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

Mark Waskiewicz

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
665-2931 304 215

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

Monongahela Power Company
Pleasants Power Station
P.O. Box 9
Willow Island, WV 26190

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

Temporary job sites of the applicant
at address listed

(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.	Mark Waskiewicz	Plant Engineer
b.	Dan Stout	Plant Engineer
c.		

7. RADIATION PROTECTION OFFICER

Harold McKinney

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	ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source)	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
NO.	A	B	C	D
(1)	Cs 137	Sealed Source	Troxler Drawing #102112	No source to exceed 9 mCi
(2)	Am 241:Be	Sealed Source	Troxler Drawing #102451	No source to exceed 40 mCi
(3)				
(4)				

DESCRIBE USE OF LICENSED MATERIAL
E

(1) Used in Troxler 3400 series Moisture - Density gauge to measure properties
(2) of construction materials.

(3) 790 7110062

License Fee Information

NEXT PAGE

OR Reverse Side

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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 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

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY N/A	<input type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments.
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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 Suggested Badge G <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____	Suggested Supplier: R. S. Landauer Co. Glenwood Science Park Glenwood, Illinois 60425 Ph. (312) 755-7000	<input type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input checked="" type="checkbox"/> OTHER (Specify): <u>Yearly</u>

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. see attached sketch
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

14. WASTE DISPOSAL

- a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED
sources 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.

Applicant...	304-313
Check No...	100(34)+110
Amount/Fee Category	Application
Type of Fee	18. CERTIFICATE
Date Check Recd	JUN 6 1979
Received By	Person

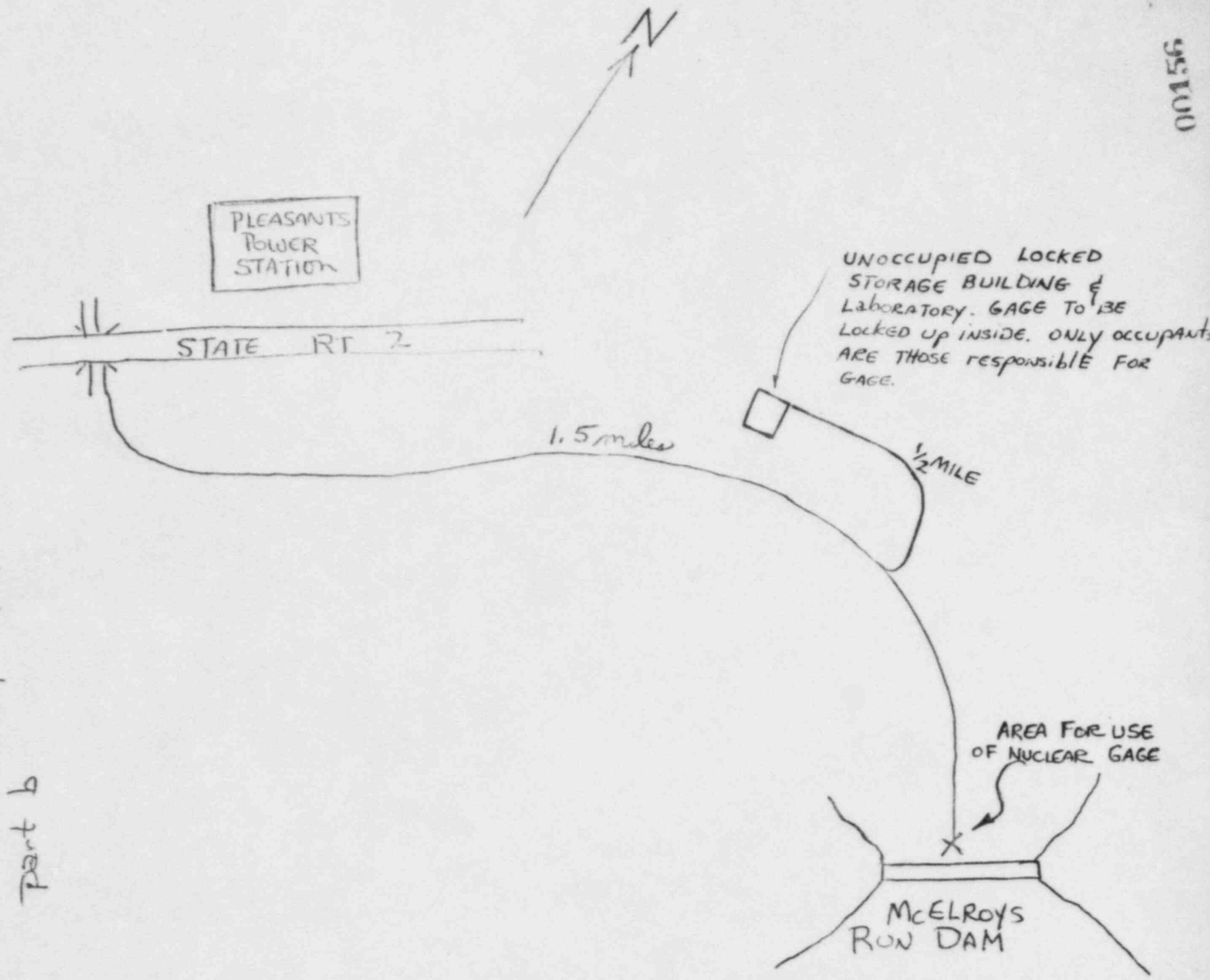
RECEIVED BY LFMB	
Date	JUN 6 1979
Log	June 6, 1979 New L.C.
By	Person
Orig. To	
Action Compl.	6/27/79

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 or any officer or employee thereof in any matter within its jurisdiction.

a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170)	b. CERTIFYING OFFICIAL (Signature) <i>H. E. Holtzworth</i>
Application only \$100.00	c. NAME (Typed print) H. E. Holtzworth
(1) LICENSE FEE CATEGORY: Category 3.L	d. TITLE Plant Manager
(2) LICENSE FEE ENCLOSED: \$100.00	e. DATE 5/31/79

13. FACILITIES & EQUIPMENT
part b



15. RADIATION PROTECTION PROGRAM

A. RADIATION PROTECTION OFFICER

The named individual, reporting to management on radiation safety matters, should coordinate:

- 1) The safe use of the gauges.
- 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 are in conformity to materials listed in 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 (when required) while using gauges.
- 6) Assure gauges 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 conditions of license are met such as:
 - a) Periodic leak tests are performed.
 - b) All required records are kept and reviewed periodically for compliance with regulations - these include source certificate, leak test records, personnel exposure records, and transfer of radioactive materials.

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 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 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) Every user organization has standard operating procedures; the operator should follow those procedures and report any that he feels are unsafe.
- 8) Insure that the gauge has had leak tests performed at the intervals required by your 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. LEAK TEST

- 1) A leak test kit will be purchased. It will be Troxler Model 3880.

16. FORMAL TRAINING IN RADIATION SAFETY

Individuals in Items 6 & 7 will receive formal training as indicated on page 2 before purchasing equipment. Training will be at Troxler Electronic Laboratories, Research Triangle, NC, June 6-7, 1979.

TRAINING SCHEDULE

SUBJECTS

First Day - 9 AM to 5 PM

I. RADIOLOGICAL SAFETY

- A. Atomic Structure
- B. Radiation Characteristics
 - 1. Types of Radiation
 - 2. Types of Sources
 - 3. Radiation Units
 - 4. Exposure Limitations
 - 5. Shielding
 - 6. Operator Exposure
- C. Handling Procedures
- D. Disposal
- E. Security
- F. Personnel Monitoring
- G. Records and Reports
- H. Incidents
- I. NRC and Agreement State Regulations
- J. Licensing Requirements
- K. Transport and Shipping
- L. Leak Testing Procedure

II. THEORY OF MEASUREMENT

- A. Gamma Radiation and Matter
- B. Test Modes-Backscatter and Direct Transmission
- C. Neutron Radiation and Matter
- D. Moisture Test Mode

III. 3401 & 3411 FIELD MEASUREMENT

- A. Daily Standard Count
- B. Site Preparation
- C. Moisture and Density Measurements
- D. Moisture and Density Corrections
- E. Trench Measurements
- F. Control Strip
- G. Roof Moisture Measurements

IV. DEMONSTRATION OF GAUGE OPERATION AND FIELD MEASUREMENT TRAINING

Second Day - 9 AM to 1 PM

V. FACTORY CALIBRATION

- A. Density Calibration
- B. Density Performance Parameters
- C. Moisture Calibration
- D. Moisture Performance Parameters

VI. PERIODIC MAINTENANCE

VII. FIELD TROUBLESHOOTING AND SERVICE

VIII. COURSE REVIEW

17. EXPERIENCE

Individuals listed in Items 6 and 7 will be trained to use instruments at suppliers (Troxler) school prior to receipt of instrument.