

**U. S. NUCLEAR REGULATORY COMMISSION
MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter 1, Parts 30, 31, 32, 33, 34, 35, 36, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s); and to import such byproduct and source material. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		
1. Peabody Coal Company	3. License number SNM-1665	
2. 301 North Main Street St. Louis, Missouri 63102	4. Expiration date August 31, 1981	
	5. Docket or Reference No. 070-02272	
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Plutonium 238	A. Sealed sources (Amersham/Searle Model FPCL)	A. 2 sources not to exceed 10 milli-curries each
9. Authorized use		
A. To be used in a Sertex Company of North America Model Phase IIIA Coal Ash Analyzer to analyze ash content of coal.		

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at Black Mesa Mine near Kayenta, Arizona.
11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
12. Licensed material shall be used by, or under the supervision of, Pete Bacchetti, Jack Ellis, Joe Johnson, or Anthony Delusio.

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MATERIALS LICENSE

Supplementary Sheet

License Number SNM-1665

Docket or
Reference No. 070-02272

CONDITIONS

(continued)

- ✓ 13. A(1) Each sealed source containing licensed material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
- (2) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the test with the U.S. Nuclear Regulatory Commission, Region III, Office of Inspection and Enforcement, 799 Roosevelt Road, Glen Ellyn, Ill. 60137, describing the equipment involved, the test results, and the corrective action taken.

MATERIALS LICENSE

Supplementary Sheet

License Number SNL-1565

Docket or
Reference No. 070-02272

CONDITIONS

13. (continued)

- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
14. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.
15. Installation, relocation, maintenance and repair of devices containing licensed material and installation, replacement and disposal of sealed sources containing licensed material used in devices shall be performed only by Pete Bacchetti or Jack Ellis or other persons specifically authorized by the Commission or an Agreement State to perform such services.
16. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee.
17. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in applications dated April 28, 1976, and June 24, 1976, and letters dated July 16, 1976, and August 3, 1976.

Date AUG 12 1976

For the U. S. Nuclear Regulatory Commission

by Radioisotopes Licensing Branch

Division of Materials and Fuel Cycle
Facility Licensing
Washington, D. C. 20555

Brown

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U5=U235, U3=U233, PU=PLUTONIUM, UR=URANIUM, TH=THORIUM, H3=TRITIUM, G=GRAMS,
Kg=KILOGRAMS, S=SEALED, UNS=UNSEALED

MATERIALS DATA INPUT S/SNM

1 - FILE COPY

A. TYPE OF ACTION AND IDENTIFICATION CODES

<input checked="" type="checkbox"/> NEW LICENSE	<input type="checkbox"/> AMENDMENT TO RENFW LICENSE	<input type="checkbox"/> AMENDMENT TO TERMINATE	<input type="checkbox"/> VOID	DOCKET NUMBER 070-02272	MAIL CONTROL NUMBER 00709	CHANGE NAME/ ADDRESS <input type="checkbox"/>
<input type="checkbox"/> NEW LICENSE AND NEW LICENSEE	<input type="checkbox"/> OTHER AMENDMENT	<input type="checkbox"/> CLERICAL CHANGE NO AMENDMENT				

B. INDICATIVE INFORMATION:

NAME (LAST, FIRST, MIDDLE)	NAME (LAST, FIRST, MIDDLE)			
	NAME (LAST, FIRST, MIDDLE)			
	NAME (LAST, FIRST, MIDDLE)			
ORGANIZATION NAME (ALPHABETIC SEQUENCE) Peabody Coal Company				
DEPARTMENT OR BUREAU				
BUILDING, STREET North Memorial Drive	CITY St. Louis	STATE MO	ZIP CODE 63102	
TYPE OF APPLICANT <input type="checkbox"/> U.S. GOVERNMENT AGENCY <input type="checkbox"/> INDIVIDUAL LICENSEE <input checked="" type="checkbox"/> ORGANIZATIONAL LICENSEE	DATE REQUEST RECEIVED 05/17/76	INSTITUTION CODE 15275	PENDING PROG. CODE 22140	ACTUAL PROG. CODE
SECONDARY PROGRAM CODES AS REQUIRED: #1 #2 #3 #4 #5				
LICENSE NUMBER SNM-1665	DATE LICENSE ISSUED OR ACTION COMPLETED 08/12/76	EXPIRATION DATE 08-31-81		

C. STATISTICAL INFORMATION:

MEDICAL CATEGORY: <input type="checkbox"/> FOR HUMAN USE ONLY <input type="checkbox"/> FOR HUMAN AND NONHUMAN USE <input checked="" type="checkbox"/> FOR NONHUMAN USE ONLY	POSSESSION OF THE MATERIAL IS AUTHORIZED IN ONE OF THE FOLLOWING AREAS: <input checked="" type="checkbox"/> SAME AS "STATE" IN ADDRESS <input type="checkbox"/> ALL STATES <input type="checkbox"/> ALL NON-AGREEMENT STATES				
AND/OR IN THE STATE(S), TERRITORY(S), COUNTRY CHECKED BELOW:					
ALABAMA -AL	GEORGIA -GA	MARYLAND -MD	NEW JERSEY -NJ	SOUTH CAROLINA -SC	WYOMING -WY
ALASKA -AK	HAWAII -HI	MASSACHUSETTS -MA	NEW MEXICO -NM	SOUTH DAKOTA -SD	
ARIZONA -AZ	IDAHO -ID	MICHIGAN -MI	NEW YORK -NY	TENNESSEE -TN	AMERICAN SAMOA -AS
ARKANSAS -AR	ILLINOIS -IL	MINNESOTA -MN	NORTH CAROLINA -NC	TEXAS -TX	CANAL ZONE -CZ
CALIFORNIA -CA	INDIANA -IN	MISSISSIPPI -MS	NORTH DAKOTA -ND	UTAH -UT	GUAM -GU
COLORADO -CO	IOWA -IA	MISSOURI -MO	OHIO -OH	VERMONT -VT	PUERTO RICO -PR
CONNECTICUT -CT	KANSAS -KS	MONTANA -MT	OKLAHOMA -OK	VIRGINIA -VA	VIRGIN ISLANDS -VI
DELAWARE -DE	KENTUCKY -KY	NEBRASKA -NB	OREGON -OR	WASHINGTON -WA	
WASHINGTON DC -DC	LOUISIANA -LA	NEVADA -N	PENNSYLVANIA -PA	WEST VIRGINIA -WV	CANADA
FLORIDA -FL	MAINE -ME	NEW HAMPSHIRE -NH	RHODE ISLAND -RI	WISCONSIN -WI	

D. POSSESSION LIMITS OF SOURCE AND SPECIAL NUCLEAR MATERIALS AND TRITIUM

SOURCE MATERIAL CEILING			SNM CEILING			"X" HERE IF FOR POWER REACTOR			
<input type="checkbox"/> GRAMS <input type="checkbox"/> KILOGRAMS			<input type="checkbox"/> GRAMS <input type="checkbox"/> KILOGRAMS						
MAT	AMOUNT	UNIT	CONFIG	ENRICH	MAT	AMOUNT	UNIT	CONFIG	ENRICH
U5		<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS				<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS	
U3		<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS				<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS	
PU	0000000001	<input checked="" type="checkbox"/> G <input type="checkbox"/> Kg	<input checked="" type="checkbox"/> S <input type="checkbox"/> UNS				<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS	
UR		<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS				<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS	
TH		<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS				<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS	
		<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS				<input type="checkbox"/> G <input type="checkbox"/> Kg	<input type="checkbox"/> S <input type="checkbox"/> UNS	
H3		<input type="checkbox"/> CURIES <input type="checkbox"/> MILLICURIES	<input type="checkbox"/> MICROCURIES	RIS CODES					

U5=U235, U3=U233, PU=PLUTONIUM, UR=URANIUM, TH=THORIUM, H3=TRITIUM, G=GRAMS, Kg=KILOGRAMS, S=SEALED, UNS=UNSEALED

MATER LS DATA INPUT S/SNM

4 - SOURCE AND SNM
REFERENCE COPY

A. TYPE OF ACTION AND IDENTIFICATION CODES

<input checked="" type="checkbox"/> NEW LICENSE	<input type="checkbox"/> AMENDMENT TO RENEW LICENSE	<input type="checkbox"/> AMENDMENT TO TERMINATE	<input type="checkbox"/> VOID	DOCKET NUMBER 070-02272	MAIL CONTROL NUMBER 00709	CHANGE NAME/ ADDRESS <input type="checkbox"/>
<input type="checkbox"/> NEW LICENSE AND NEW LICENSEE	<input type="checkbox"/> OTHER AMENDMENT	<input type="checkbox"/> CLERICAL CHANGE NO AMENDMENT				

B. INDICATIVE INFORMATION:

NAME (LAST, FIRST, MIDDLE)	NAME (LAST, FIRST, MIDDLE)
NAME (LAST, FIRST, MIDDLE)	NAME (LAST, FIRST, MIDDLE)
NAME (LAST, FIRST, MIDDLE)	NAME (LAST, FIRST, MIDDLE)

ORGANIZATION NAME (ALPHABETIC SEQUENCE)

Peabody Coal Company

DEPARTMENT OR BUREAU

BUILDING, STREET

North Memorial Drive

CITY

St. Louis

STATE

MO

ZIP CODE

63102TYPE
OF
APPLICANT

- ☐ U.S. GOVERNMENT AGENCY
☐ INDIVIDUAL LICENSEE
☒ ORGANIZATIONAL LICENSEE

DATE REQUEST
RECEIVED**05/17/76**

INSTITUTION CODE

15275

PENDING PROG. CODE

22140ACTUAL PROG.
CODE

SECONDARY PROGRAM CODES AS REQUIRED:

#1	#2	#3	#4	#5
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LICENSE NUMBER

DATE LICENSE ISSUED
OR ACTION COMPLETED

EXPIRATION DATE

APPLICANT'S COMMUNICATION DATED:

April 28, 1976

CLASSIFICATION

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ASSIGNED TO:

RESULTING AMD. NO.

ENCLOSURES:

Copy of NRC's acceptance letter along with the Radiation Safety Section for removing and replacing the radioactive isotope.

UNCLASSIFIED DESCRIPTION:

Letter transmit requesting a special nuclear material license for possession and use of a plutonium gauge.

DISTRIBUTION:

PDR**I&E (2)**

OTHER REFERRALS

NAME	DATE	NAME	DATE
Bassin; Reg file copy and folder	6-3-76		