

# **BLACK BEAUTY COAL CO.**

March 13, 2007

Nuclear Materials License Branch  
U.S. NRC, Region III  
2443 Warrenville Rd., Suite 210  
Lisle, IL 60532-4352

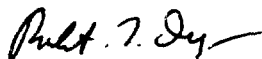
Re: Renewal of Materials License 13-26785-01

Dear NRC:

Please find enclosed a completed NRC Form 313 with attachment. Also enclosed is a photocopy of the current license which expires on April 30, 2007.

We hereby request renewal of Materials License 13-26785-01.

Sincerely,



Robert L. Dyer, Regional RSO  
Black Beauty Coal Co.  
7100 Eagle Crest Blvd.  
Evansville, IN 47715  
(812) 434-8537  
(812) 424-9064 (fax)

encl.

**RECEIVED MAR 20 2007**

(8-2000)  
10 CFR 30, 32, 33,  
34, 35, 36, 39, and 40

## APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this mandatory collection request: 7.4 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0000), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

## APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY  
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

## ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

## IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,  
MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA,  
RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION  
NUCLEAR MATERIALS SAFETY BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO  
RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,  
SEND APPLICATIONS TO:

SAM NUNN ATLANTA FEDERAL CENTER  
U. S. NUCLEAR REGULATORY COMMISSION, REGION II  
61 FORSYTH STREET, S.W., SUITE 23785  
ATLANTA, GEORGIA 30303-8831

## IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND  
APPLICATIONS TO:

MATERIALS LICENSING BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
801 WARRENVILLE RD.  
LISLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,  
LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA,  
OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR  
WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-8064

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED  
MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

## 1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE  
☐ B. AMENDMENT TO LICENSE NUMBER  
☒ C. RENEWAL OF LICENSE NUMBER

13-26785-01

## 2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

BLACK BEAUTY COAL CO.  
7100 EAGLE CREST BLVD  
EVANSVILLE, IN 47715

## 3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

SEE ATTACHMENT A

## 4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

ROBERT L. DYER

## TELEPHONE NUMBER

812-434-8537

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

## 5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount  
which will be possessed at any one time.

## 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR  
TRAINING EXPERIENCE.

## 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

## 9. FACILITIES AND EQUIPMENT.

## 10. RADIATION SAFETY PROGRAM.

## 11. WASTE MANAGEMENT.

## 12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY

AMOUNT  
ENCLOSED \$

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING  
UPON

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN  
CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND  
CORRECT TO THE BEST OF THEIR 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.

## CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

ROBERT L. DYER RSO

## SIGNATURE

Robert L. Dyer

## DATE

3-13-07

## FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

**APPLICATION FOR RENEWAL  
OF MATERIAL LICENSE 13-26785-01**

**ATTACHMENT A**

**APPLICATION  
ITEM**

**APPLICANT RESPONSE**

3	<p>The existing license authorizes use of licensed material at three (3) locations. The physical addresses of these locations are as follows:</p> <p>A.     Black Beauty Francisco Mine           County Road 850 East           Francisco, Indiana 47649</p> <p>B.     Black Beauty Farmersburg Mine           5526 East French Drive           Pimento, Indiana 47866</p> <p>C.     Black Beauty Somerville Central Mine           R.R. #3, Box 155           Oakland City, Indiana 47660</p>
5	<p>The existing license authorizes possession of the following materials:</p> <p>A.   Californium-252, sealed source, 9 sources not to exceed 108 millicuries total B.   Cesium-137, sealed source, 2 sources not to exceed 25 millicuries each C.   Californium-252, sealed source, 2 sources not to exceed 27 millicuries each</p>
6	<p>Sub-items 5A &amp; 5B: To be used in Gamma-Metrics Bulk Material Analyzer Model 2000 source holder for measurements of elemental analysis of coal and measurements of density/weight.</p> <p>Sub-item 5C: To be used in Sabia Model XC-50 Series source holders for analysis of the chemical elemental composition of coal.</p>
7	<p>Individuals responsible for radiation safety program:</p> <p>All Locations: Robert L. Dyer, Regional Radiation Safety Officer</p> <p>Location 3A: Keith Kilmer, Radiation Safety Officer Location 3B: Randy Bowman, Radiation Safety Officer Location 3C: Brad Lawyer, Radiation Safety Officer</p> <p>Training:</p> <p>Before using licensed materials, authorized users will have successfully completed one of the training courses described in Criteria in the section entitled "Authorized Users" in NUREG-1556, Volume 4, Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses, dated October 1998.</p>

**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 I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 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). 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.

<p>Licensee</p> <p>1. Black Beauty Coal Company</p> <p>2. <b>7100 Eagle Crest Blvd., Suite 100</b> <b>Evansville, IN 47715</b></p>	<p>In accordance with letter dated <b>July 25, 2005</b>,</p> <p>3. License number 13-26785-01 is amended in its entirety to read as follows</p> <p>4. Expiration date April 30, 2007</p> <p>5. Docket No. 030-34405 Reference No.</p>
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Californium-252</p> <p>B. Cesium-137</p> <p>C. Californium--252</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed Source (Amersham Model CVN-CY6 or Frontier Technology Model 100 Series)</p> <p>B. Sealed Source (Knapes Products Labs Model 225 CDC 704 and CDC 705)</p> <p>C. Sealed Sources (AEA Technologies, Inc. Models CVN-CN2, CVN-CY6, CVN.5, CVN.6, CVN.7, CVN.10, and CVN.11; Frontier Technology Models 100 and 100S)</p> <p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 9 sources not to exceed 108 millicuries total</p> <p>B. 2 sources not to exceed 25 millicuries each</p> <p>C. 2 sources not to exceed 27 millicuries each</p>
<p>9. Authorized Use:</p> <p>A. and B. To be used in Gamma-Metrics Bulk Material Analyzer Model 2000 source holder for measurements of elemental analysis of coal and measurements of density/weight.</p> <p>C. To be used in Sabia Model XC-50 Series source holders for analysis of the chemical elemental composition of coal.</p>	

**CONDITIONS**

10. A. Licensed material listed in subitems 6.A and 6.B. shall be used at the licensee's facility located at Francisco Mine, County Road 850 East, Francisco, Indiana.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
13-26785-01Docket or Reference Number  
030-34405

Amendment No. 05

- B. Licensed material listed in subitem 6.C. shall be used at the licensee's facilities located at Farmersburg Mine, 5526 East French Drive, Pimento, Indiana and Somerville Central Mine, R.R. #3, Box 155, Oakland City, Indiana.
11. A. The Radiation Safety Officer for this license is Robert L. Dyer.
- B. The Assistant Radiation Safety Officers for this license are Keith Kilmer (Francisco Mine); Randy Bowman (Farmerburg Mine); and Chad Wirthwein (Somerville Central Mine).
12. Licensed material shall only be used by, or under the supervision of individuals who have received the training described in letter dated February 3, 2005. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.
13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
- C. In the absence of a certificate from a transfer indicating that a leak test has been made within 6 months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2) and the source shall be removed immediately from service and decontaminated, repaired or disposed of in accordance with Commission regulations.
- E. The licensee is authorized to collect leak test samples for analysis by Gamma-Metrics. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.
15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
13-26785-01Docket or Reference Number  
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16. Installation, initial radiation survey, relocation, removal from service, maintenance, and repair of devices containing sealed sources shall be performed by or by persons specifically licensed by the Commission or an Agreement State to perform such services. Installation, replacement, and disposal of sealed sources shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services.
17. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above and below the gauge with the shutter open. This survey shall be performed only by persons authorized to perform such services by the Commission or an Agreement State.
18. The licensee shall operate each gauge within the manufacturer's specified temperature and/or environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.
19. The licensee shall assure that the shutter mechanism is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify as appropriate its "lock-out" procedures whenever a new gauge is obtained to incorporate the device manufacturer's recommendations.
20. Each gauge shall be tested for the proper operation of the on-off mechanism and indicator, if any, at no longer than 6-month intervals or at such longer intervals as specified by the manufacturer and approved by NRC.
21. The procedures contained in Gamma-Metrics' instruction manual for the Model 2000 device shall be followed and a copy of this manual shall be made available to each person using or having responsibility for the use of the device.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
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030-34405

Amendment No. 05

22. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

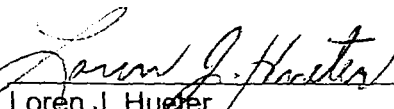
- A. Letters dated March 25, 1997 (with attachments), February 3, 2005; and
- B. Application dated December 20, 2004.

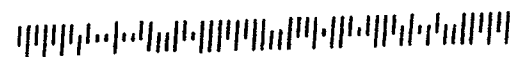


FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date OCT 06 2005

By

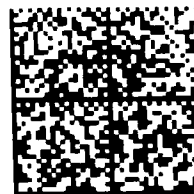
  
Loren J. HueterMaterials Licensing Branch  
Region III



**CERTIFIED MAIL™**



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03/13/2007

Mailed From 47715  
US POSTAGE

Robert L. Dyer, Geologist  
Peabody Energy  
7100 Eagle Crest Blvd.  
Suite 200  
Evansville, IN 47715

**FIRST CLASS MAIL**

FROM.



**Black Beauty  
Coal Company**

7100 EAGLE CREST BLVD., EVANSVILLE, IN 47715 TELEPHONE (812) 434-8500

TO.

NUCLEAR MATLS LICENSE BRANCH  
U.S. NRC, REGION III, STE 210  
2443 WARRENVILLE RD  
LISLE, IL 60532-4352