



**COAL MAC, LLC**  
*P. O. Box 1050*  
*Holden, WV 25625*  
*304/792-8400 (fax 304/792-8401)*

January 4, 2023

Attn: Betsy Ullrich  
Mail Control No. 632250  
USNRC, Region 1  
Division of Radiological Safety and Security  
475 Allendale Road – Suite 102  
King of Prussia, PA 19406

Re: Coal Mac, LLC  
Renewal of Materials License No. 47-25599-01

Dear Ms. Ullrich:

Please find enclosed our revised Application for Renewal of Coal-Mac LLC Materials License No. 47-25599-01 for our coal preparation and loading facilities located in Logan and Mingo Counties of West Virginia. The revised application addresses the modifications/additions suggested in your correspondence dated December 22, 2022.

Should you have any questions, or need additional information, please contact me at the phone numbers or email listed below.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Timothy H. Evans'.

Timothy H. Evans  
Project Manager

304-792-8443 (office)  
304-687-8237 (cell)  
tim.evans@jmpholdingsllc.com



**UNITED STATES**  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD – SUITE 102  
KING OF PRUSSIA, PA 19406-1415

December 22, 2022

Timothy H. Evans, Project Manager  
Coal-Mac, LLC  
P. O. box 1050  
22 Mine Road  
Holden, WB 25625

SUBJECT: COAL-MAC, LLC, REQUEST FOR ADDITIONAL INFORMATION, MAIL  
CONTROL NO. 632250

Dear Mr. Evans:

This is in reference to your letter dated July 26, 2022, requesting to renew NRC License No. 47-25599-01. In order to continue our review, we need the following additional information:

1. In accordance with NUREG-1556, Volume 4, Revision 1 "Program-Specific Guidance About Fixed Gauge Licenses." (NUREG-1556, Vol. 4, Rev. 1) Section 8.7.2, "Authorized Users," state "Before using licensed materials, authorized users will have successfully completed one of the training courses described in the "Criteria" part of the section titled "Authorized Users" in NUREG-1556, Vol. 4, Rev. 1."
2. In accordance with NUREG-1556, Vol. 4, Rev. 1, Section 8.10.2, "Radiation Monitoring Instruments," state "Surveys according to 10 CFR 20.1501 will be performed by a person specifically authorized by the NRC or an Agreement State to perform these surveys." Or you may submit one of the alternate means of performing surveys described in Section 8.10.2.
3. In accordance with NUREG -1556, Vol. 4, Rev. 1, Section 8.10.3, "Material Receipt and Accountability," state "Physical inventories will be conducted every 6 months or at other intervals approved by the NRC to account for all sealed sources and devices received and possessed under the license."
4. In accordance with NUREG-1556, Vol. 4, Rev. 1, Section 8.10.4, "Occupational Dose" state either that
  - a. "We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a);
  - OR state
  - b. "We will provide and require the use of individual monitoring devices (dosimetry). All personnel dosimeters that require processing to determine the radiation dose will be processed and evaluated by a NVLAP-approved processor."

5. In accordance with NUREG-1556, Col. 4, Rev. 1, Section 8.10.6, "Operating, Emergency, and Security Procedures," provide ONE of the following:
  - a. If the gauges meet one or more of the safety conditions specific in the "Discussion" portion of this section, state "Operating, emergency and security procedures will be developed, implemented, maintained and distributed and will meet the criteria in Section 8.10.6 of NUREG-156, Vol. 4, Rev. a." ;  
OR
  - b. If the gauges do not meet any of the safety conditions specified in the "Discussion" portion of Section 8.10.6, provide your operating, emergency, security, and lock-out procedures.
6. In accordance with NUREG-1556 Vol. 4, Rev. 1, Section 8.10.7, "Leak Tests," state "Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed Source and Device registration certificate. Leak tests will be performed by an organization licensed by the NRC or an Agreement State to provide leak testing services to other licensees; or by using a leak test sample collection kit supplied by an organization licensed by the NRC or an Agreement State to provide leak test kits and/or sample analysis services to other licensees and according to the kit supplier's instructions. Records of leak test results will be maintained." Alternately, provide one of the other means of performing leak tests as stated in Section 8.10.7.
7. In accordance with NUREG-1556, Vol. 4, Rev. 1, Section 8.10.8, "Maintenance,"
  - a. For routine maintenance, either state "We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's or distributor's written recommendations and instructions." Or provide alternate procedures for NRC review.  
AND
  - b. For non-routine operations, either state "The gauge manufacturer, distributor, or other person licensed by the NRC or an Agreement State will perform nonroutine operations such as installation, initial radiation survey, repair and maintenance of radiological safety components, relocation, replacement, alignment, removal from services, and disposal of sealed sources." OR request the work that you wish to perform and use the information in Appendix J to support the request.

We will continue our review upon receipt of this information. A pdf of an originally signed letter may be provided attached to an email sent to [Elizabeth.Ullrich@nrc.gov](mailto:Elizabeth.Ullrich@nrc.gov) . Alternately, a hard copy response may be provided by regular mail to:

Attn: Betsy Ullrich  
Mail Control No. 632250  
USNRC, Region I  
Division of Radiological Safety and Security  
475 Allendale Road – Suite 102  
King of Prussia, PA 19406

In order to continue prompt review of your application, we request that you submit your response to this letter within 30 calendar days from the date of this letter.

An electronic version of the NRC's regulations is available on the NRC Web Site at: [www.nrc.gov](http://www.nrc.gov). Additional information regarding use of radioactive materials may be obtained on the NRC Web Site at: <http://www.nrc.gov/materials/miau/mat-toolkits.html>. This site also provides the link to the toolbox for updated information on the revised regulations for naturally-occurring and accelerator-produced radioactive materials (NARM).

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web Site at: <http://www.nrc.gov/reading-rm/adams.html>. Please be aware that you may request that certain portions of your submittal to NRC be withheld from public disclosure as proprietary information. To do this, you must execute an affidavit as specified in 10 CFR 2.390. You must list all portions that you wish to be held proprietary, along with your reasoning as to why that is appropriate. While it is allowable, please refrain from submitting proprietary information in support of a license unless necessary. Keep in mind that all NRC licenses are considered to be in the public domain, and therefore may be viewed by any member of the public who requests to see them.

If you have any questions regarding this request for additional information, please contact me at 240-704-4575 or by electronic mail to [Elizabeth.Ullrich@nrc.gov](mailto:Elizabeth.Ullrich@nrc.gov).

Thank you for your cooperation.

Sincerely,

Betsy Ullrich, Senior Health Physicist  
Commercial, Industrial, R&D  
and Academic Branch  
Division of Radiological Safety and Security  
Region I

License No. 47-25599-01  
Docket No. 030-36047  
Mail Control No. 632250

cc: Doug Boyd, Radiation Safety Officer

COAL-MAC, LLC, REQUEST FOR ADDITIONAL INFORMATION, MAIL CONTROL NO.  
632250 DATED DECEMBER 28, 2022

DOCUMENT NAME: [\\nrc.gov\nrc\R1\Office\DNMS\WBL Documents\WBL License RAI\L47-25599-01.632250..docx

**SUNSI Review Complete:** Betsy Ullrich

After declaring this document "An Official Agency Record" it will be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	RI:DRSS	N					
NAME	Betsy Ullrich						
DATE	12/28/22 exu						

OFFICIAL RECORD COPY



**COAL MAC, LLC**  
*P. O. Box 1050*  
*Holden, WV 25625*  
*304/792-8400 (fax 304/792-8401)*

July 26, 2022

Licensing Assistance Team  
Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission, Region 1  
2100 Renaissance Boulevard, Suite 100  
King of Prussia, PA 19406-2713

Re: Coal Mac, LLC  
Renewal of Materials License No. 47-25599-01

Dear Sir or Madam:

Please find enclosed our Application for Renewal of Coal-Mac LLC Materials License No. 47-25599-01 for our coal preparation and loading facilities located in Logan and Mingo Counties of West Virginia.

Should you have any questions, or need additional information, please contact me at the phone numbers or email listed below.

Sincerely,

A handwritten signature in black ink, appearing to read 'Timothy H. Evans', with a stylized flourish at the end.

Timothy H. Evans  
Project Manager

304-792-8443 (office)  
304-687-8237 (cell)  
tim.evans@jmpholdingsllc.com



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

July 1, 2022

ATTN: Radiation Safety Officer  
Coal-Mac, LLC  
Harless Industrial Park  
22 Mine Road  
Holden, WV 25625

Re: License No. 47-25599-01

SUBJECT: NOTICE OF LICENSE EXPIRATION

Your U.S. Nuclear Regulatory Commission (NRC) license will expire within the next 2 months. If you wish to continue your licensed program, you should prepare and submit a renewal application on NRC Form 313, "Application for Materials License" (enclosed), following regulations in *Title 10 of the Code of Federal Regulations* (10 CFR) and licensing guidance NUREG 1556, "Consolidated Guidance About Materials Licenses."

You must submit an application for the renewal of your license at least 30 days before the expiration date on the license.

If you do not wish to renew your license, you must dispose of or transfer all licensed radioactive material in your possession in accordance with 10 CFR Parts 30, 40 and 70. Then complete the enclosed NRC Form 314, "A Certificate of Disposition of Materials" and return it before the expiration date of your license, with a request that your license be terminated. If you have already applied for timely renewal of your materials license, please disregard this letter."

Sincerely,

/RA/

Materials Safety and Tribal Liaison Branch  
Division of Material Safety, Security, State,  
and Tribal Program  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:

1. NRC Form 313
2. NRC Form 314



(10-2017)  
10 CFR 30, 32,  
33, 34, 35, 36,  
37, 39, and 40



## APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to [Infocollects.Resource@nrc.gov](mailto:Infocollects.Resource@nrc.gov), and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), 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 CURRENT VOLUMES OF THE NUREG-1556 TECHNICAL REPORT SERIES ("CONSOLIDATED GUIDANCE ABOUT MATERIALS LICENSES") FOR DETAILED INSTRUCTIONS FOR COMPLETING THIS FORM: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>. SEND TWO COPIES OF THE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

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

MATERIALS SAFETY LICENSING BRANCH  
DIVISION OF MATERIAL SAFETY, STATE, TRIBAL AND RULEMAKING PROGRAMS  
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:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,

#### SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM  
DIVISION OF NUCLEAR MATERIALS SAFETY  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PA 19406-2713

#### 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  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

#### IF YOU ARE LOCATED IN:

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, 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 BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
1600 E. LAMAR BOULEVARD  
ARLINGTON, TX 76011-4511

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

47-25599-01

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

Coal-Mac LLC  
P.O. Box 1050, 22 Mine Road  
Holden, WV 25625

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

Ragland Loadout Facility  
16 Duty Branch Road  
Delbarton, WV 25670  
Holden 22 Plant  
Pine Creek Road  
Omar, WV 25638

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

Doug Boyd

#### BUSINESS TELEPHONE NUMBER

304-792-8400

#### BUSINESS CELLULAR TELEPHONE NUMBER

606-424-6121

#### BUSINESS E-MAIL ADDRESS

doug.boyd@jmpholdingsllc.com

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 AND 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 (Fees required only for new applications, with few exceptions\*) (See 10 CFR 170 and Section 170.31)

\*Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.

FEE  
CATEGORY

AMOUNT  
ENCLOSED \$

PER THE DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), YOU ARE REQUIRED TO PROVIDE YOUR TAXPAYER IDENTIFICATION NUMBER. PROVIDE THIS INFORMATION BY COMPLETING NRC FORM 531: <https://www.nrc.gov/reading-rm/doc-collections/forms/nrc531info.html>.

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

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, 37, 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

Doug Boyd - RSO

#### SIGNATURE

Doug Boyd

#### DATE

7/26/22

### FOR NRC USE ONLY

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



## 5. RADIOACTIVE MATERIAL

a. Element & Mass number	b. chemical and/or physical form	c. maximum amount which will be possessed at any one time.
<b>Cesium 137</b>	A. Sealed Sources (QSA/Amersham Models CDC.704, CDC.705, CDC.806, CDC.P4, CDC.93 CDC.ZT1; Isotope Products Laboratories Models 225, Cs7.PO2, CsPO4-A; Berthold Technologies SSC Series; Thermo Fisher Models 696894 and 57157C)	800 millicuries total. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S Nuclear Regulatory Commission or an Agreement State
<b>Californium 252</b>	B. Sealed Sources QSA/Amersham Models CDC .700 Series, CVN.Cyn Series, CVN.CY6, CDC.CY7, CVN.CY8, CVN.CY14, CVN.CY15, CVN.CY16, CVN.CY17; Frontier Technology Corp. Model 100 Series; FSUE Model HK252M41 Series; GE Hitachi Model GEN-Cf-100 Series; Isotope Product Laboratories Models 3004, 3014, and N-252 Series)	115 millicuries total. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S Nuclear Regulatory Commission or an Agreement State

**SUGGESTED FORMAT FOR PROVIDING INFORMATION REQUESTED IN  
ITEMS 5 THROUGH 11 OF  
U.S. NUCLEAR REGULATORY COMMISSION FORM 313**

**Items 5 and 6: Materials To Be Possessed and Proposed Uses**

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Isotope (Specify):  <i>Cs-137</i>	Device manufacturer (or distributor) and model number:  <i>Density Pro+ S201 serial # B5239</i>	Specify activity per source and number of gauges requested.  <i>59 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>analyze coal Refuse (slurry)</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>Cs-137</i>	Device manufacturer (or distributor) and model number:  <i>Density Pro+ S201 serial # B4777</i>	Specify activity per source and number of gauges requested.  <i>74.98 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>analyze coal Refuse (slurry)</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>Cs-137</i>	Device manufacturer (or distributor) and model number:  <i>Density Pro+ S201 serial # B4776</i>	Specify activity per source and number of gauges requested.  <i>76.87 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>analyze coal Refuse (slurry)</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Is financial assurance required? If yes, submit evidence of financial assurance.				

**NOTE: Copy and attach additional pages as needed.**

**SUGGESTED FORMAT FOR PROVIDING INFORMATION REQUESTED IN  
ITEMS 5 THROUGH 11 OF  
U.S. NUCLEAR REGULATORY COMMISSION FORM 313**

**Items 5 and 6: Materials To Be Possessed and Proposed Uses**

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Isotope (Specify):  <i>Cs-137</i>	Device manufacturer (or distributor) and model number:  <i>Berthold LB 7440D serial # 0078/05</i>	Specify activity per source and number of gauges requested.  <i>22.35 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>Analyze ash and moisture content - Coal</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>Cf-252</i>	Device manufacturer (or distributor) and model number:  <i>ECA (CBx) CBx serial # 3637NU</i>	Specify activity per source and number of gauges requested.  <i>4.91 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>analyze coal ash &amp; moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>Cf-252</i>	Device manufacturer (or distributor) and model number:  <i>ECA (CBx) CBx serial # FTC-CF-4327</i>	Specify activity per source and number of gauges requested.  <i>1.01 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>analyze coal - ash and moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
Is financial assurance required? If yes, submit evidence of financial assurance.						

**NOTE: Copy and attach additional pages as needed.**



**SUGGESTED FORMAT FOR PROVIDING INFORMATION REQUESTED IN  
ITEMS 5 THROUGH 11 OF  
U.S. NUCLEAR REGULATORY COMMISSION FORM 313**

**Items 5 and 6: Materials To Be Possessed and Proposed Uses**

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Isotope (Specify):  <i>CF-252</i>	Device manufacturer (or distributor) and model number:  <i>ECA (CBX) CBX Serial # FTC-CF-6851</i>	Specify activity per source and number of gauges requested.  <i>0.47 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>Analyze Coal ash and moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>CF-252</i>	Device manufacturer (or distributor) and model number:  <i>ECA (CBX) CBX Serial # FTC-CF-23000</i>	Specify activity per source and number of gauges requested.  <i>0.49 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>Analyze Coal ash and moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>Cs-137</i>	Device manufacturer (or distributor) and model number:  <i>CQM (CB-HI) CB-HI Serial # V-953</i>	Specify activity per source and number of gauges requested.  <i>6.13 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>Analyze Coal ash and moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Is financial assurance required? If yes, submit evidence of financial assurance.				

**NOTE: Copy and attach additional pages as needed.**

**SUGGESTED FORMAT FOR PROVIDING INFORMATION REQUESTED IN  
ITEMS 5 THROUGH 11 OF  
U.S. NUCLEAR REGULATORY COMMISSION FORM 313**

**Items 5 and 6: Materials To Be Possessed and Proposed Uses**

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Isotope (Specify):  <i>Cf-252</i>	Device manufacturer (or distributor) and model number:  <i>CQM (CB-H1) CB-H1 Serial # FTC-CF-5118</i>	Specify activity per source and number of gauges requested.  <i>2.36 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>Analyze Coal ash and Moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>Cf-252</i>	Device manufacturer (or distributor) and model number:  <i>CQM (CB-H1) CB-H1 Serial # FTC-CF-7889</i>	Specify activity per source and number of gauges requested.  <i>1.53 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>Analyze Coal ash and Moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Isotope (Specify):  <i>Cf-252</i>	Device manufacturer (or distributor) and model number:  <i>CQM (CB-H1) CB-H1 Serial # FTC-CF-6140</i>	Specify activity per source and number of gauges requested.  <i>4.81 mCi</i>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use:  <i>Analyze Coal ash and Moisture content</i>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
		Is financial assurance required? If yes, submit evidence of financial assurance.				

**NOTE: Copy and attach additional pages as needed.**



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

Coal analysis – measuring materials density, ash and moisture content.

## **7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM**

Doug Boyd – RSO – Coal-Mac LLC

See attached certification

## **8. TRAINING FOR INDIVIDUALS WORKING IN OR AROUND RESTRICTED AREAS**

Coal-Mac's Safety Training Program and Annual Audits will be available for review during NRC inspections.

Before using licensed materials, authorized users will have successfully completed one of the training courses described in the "Criteria" part of the section titled "Authorized Users" in NUREG-1556, Vol. 4, Rev. 1.

## **9. FACILITIES AND EQUIPMENT**

Coal-Mac LLC will ensure that the location of each fixed gauge meets the criteria in Section 8.9, "Facilities and Equipment," in NUREG-1556, Volume 4, Revision 1, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Fixed Gauge Licenses."

### **10.1 RADIATION SAFETY PROGRAM**

Coal-Mac LLC will conduct an annual review of the content and implementation of their radiation protection program.

A summary of these annual audits will be kept on file with the RSO for a minimum of three (3) years and will be available for review during NRC inspections.

### **10.2 RADIATION MONITORING INSTRUMENTS**

Surveys according to 10 CFR 20.1501 will be performed by a person specifically authorized by the NRC to perform these surveys.

### **10.3 MATERIAL RECEIPT AND ACCOUNTABILITY**

Physical inventories will be conducted every 6 months to account for all sealed sources and devices received and possessed under the license.

## **10.4 OCCUPATIONAL DOSE**

Coal-Mac will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a).

## **10.6 OPERATING, EMERGENCY, AND SECURITY PROCEDURES**

“Operating, emergency and security procedures will be developed, implemented, maintained and distributed and will meet the criteria in Section 8.10.6 of NUREG-156, Vol. 4, Rev. a.

## **10.7 LEAK TESTS**

Leak tests will be performed at intervals approved by the NRC and specified in the Sealed Source and Device registration certificate. Leak tests will be performed by an organization licensed by the NRC or an Agreement State to provide leak testing services to other licensees; or by using a leak test sample collection kit supplied by an organization licensed by the NRC or an Agreement State to provide leak test kits and/or sample analysis services to other licensees and according to the kit supplier’s instructions. Records of leak test results will be maintained.

## **10.8 MAINTENANCE**

Coal-Mac will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer’s or distributor’s written recommendations and instructions.

## **11 WASTE MANAGEMENT**

Any transfer, disposal or relocation of gauges will be conducted solely by an authorized third party specializing in radioactive materials handling.



# CERTIFICATE OF RADIOLOGICAL TRAINING

*This is to certify that*

***Doug Boyd***

*has been successfully trained and tested in the following*

**8-HOUR RADIATION SAFETY OFFICER REFRESHER TRAINING  
AND INSTRUCTION AS REQUIRED BY NUREG-1556  
VOLUME 4, APPENDIX G AND 49 CFR 172, SUBPART H**

*presented by Applied Health Physics, LLC  
October 14<sup>th</sup>, 2019*

*Todd Mobley*

*Instructor: Todd Y. Mobley, President  
Training Materials Located at:  
Applied Health Physics, LLC  
2986 Industrial Blvd., Bethel Park, PA 15102*

*October 14, 2019*

*Completion Date*

*October 14, 2022*

*DOT Subpart H Expiration Date*