



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

April 20, 2021

Alan Pancake
Radiation Safety Officer
Peabody Midwest Mining, LLC
566 Dickeyville Rd.
Lynnville, MO 47619

Dear Mr. Pancake:

This letter is in reference to your request dated April 8, 2021, requesting an amendment to your U.S. Nuclear Regulatory Commission (NRC) Materials License No. 13-26785-01. Upon review, I identified the following areas requiring additional or clarifying information:

1. Your request refers to the transfer/disposal of four californium-252 (Cf-252) Frontier Technology Corporation Model FT-100 Series sealed sources, including the following models and serial numbers:
 - Frontier Technology Corporation Model 100, S/N FTC-CF-4467
 - Frontier Technology Corporation Model 100, S/N FTC-CF-4468
 - Frontier Technology Corporation Model 100SNS, S/N FTF-CF-3660
 - Frontier Technology Corporation Model 100S, S/N FTC-CF-6749

The above Cf-252 sealed sources were previously approved for analysis of the chemical elemental composition of coal using a SABIA, Inc. Model XC-Series-25 Material Analyzer, Device S/N 1204-600370-0011. Please clarify if you are decommissioning the SABIA, Inc., Model XC-Series-25 Material Analyzer and requesting to have the device removed from your license.

2. If applicable, submit documentation to support the removal of the SABIA, Inc., Model XC-Series-25 Material Analyzer from your license and the release of the Somerville Central Preparation Plant to unrestricted use:

Appropriate documentation should include the following:

- Radiation survey of the empty SABIA, Inc., Model XC-Series-25 Material Analyzer, Device S/N 1204-600370-0011, or other records confirming the removal of all Cf-252 sealed sources and the absence of residual radioactive material.
- A description of any incidents involving ruptured, leaking or lost sealed sources or any other incidents involving radioactive materials at the licensed location of use and storage of radioactive material.

For your reference, the program specific guidance for your license is NUREG-1556, Volume 4, Rev. 1 dated July 2016. This guidance is available on the NRC Web site at:

<https://www.nrc.gov/docs/ML1618/ML16188A048.pdf>

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <https://www.nrc.gov/reading-rm/adams.html>.

To continue review of your request, please submit your response to this letter within 30 calendar days from the date of this letter. In your response, please refer to the license, docket, and control number specified below. I will assume that you do not wish to further pursue this licensing action if I do not receive a reply within the specified timeframe noted above.

If you have questions, require additional time to respond, or require clarification on any of the information stated above, I encourage you to contact me at either (630) 829-9737 or at Jason.Kelly@nrc.gov.

Sincerely,

Jason M. Kelly, MPH
Health Physicist
Materials Licensing Branch

Docket No.: 030-34405
License No.: 13-26785-01
Control No.: 625347