



Date: April 30, 2014

**VIA Email**

Sattar Lodhi  
NRC Region I  
(610) 337 5364

47-35142-01  
030-38733

RE: Tunnel Ridge, LLC  
Specific License Application

Dear: Mr. Lodhi,

This letter is in response to your comment on nonroutine maintenance in the Tunnel Ridge, LLC application for a NRC Specific License.

Please find the complete revised attachment to the application which answers questions 5 through 11 of the application.

If you have any questions regarding these mining activities, do not hesitate to call me at (304) 547-2904.

Very truly yours,

John Dubowski, P.E.  
Environmental Coordinator  
Tunnel Ridge, LLC  
2596 Battle Run Road  
Triadelphia, WV 26059

583589  
NMSS/RGNI MATERIALS-002

## Answers to questions 5 through 11 on US NRC Form 313

Tunnel Ridge, LLC  
2596 Battle Run Road  
Triadelphia, WV 26059

5a. Californium-252

5b. Sealed Source Model Designation:

Frontier Technology Corp.

Models: 10, 10S, 100, 100S

ANSI/ISO Classification 77E66344

Amersham Corporation

Model: CVN.CY6

ANSI/ISO classification 77C64545

AEA Technology

Model CVN.CY6

ANSI/ISO Classification 77C64545

Device Manufacturer/Distributor: Thermo Electron Corporation

5788 Pacific Center Blvd.

San Diego, CA 92121

5c. Californium-252 (hydrogenous materials)

40 ug, 21 mCi (0.78 GBq) +15%/-0%

Up to six sources

Californium-252 (low hydrogenous materials)

80 ug, 42 mCi (1.56 GBq) +/-5%

Up to six sources

Principal use: (H) General Neutron Source Applications

6. The Thermo Scientific ECA is a Prompt Gamma Neutron Activation Analyzer (PGNAA) designed to mount around an existing conveyor belt and analyze the composition of the coal on the belt in real-time.

7. John Dubowski will be responsible for the Radiation Safety Program. He is scheduled for Radiation Safety Officer training at Applied Health Physics, Inc., 2986 Industrial Blvd., Bethel Park, PA 15102 on May 5-7, 2014.

7.1 Radiation Safety Office will be John Dubowski

7.2 Before using licensed materials, authorized users will have successfully completed one of the training courses described in the 'Criteria' part of the section entitled 'Authorized Users' in the current version of NUREG-1556, Volume 4, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses.

8. Need not be submitted with application.

9. We will ensure that the location of each fixed gauge meets the criteria in Section 8.9, 'Facilities and Equipment,' in the current version of NUREG-1556, Volume 4, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses.

10. Audit Program - Need not be submitted with application.

Instruments - 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.

Material Receipt and Accountability - Physical inventories will be conducted at least 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. We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times.

Occupational Dose - We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10 percent of the allowable limits in 10 CFR Part 20.

Public Dose - Need not be submitted with application.

Operating and Emergency Procedures - Operating, emergency, and security procedures will be developed, implemented, maintained, and distributed, and will meet the criteria in Section 8.10.6, 'Operating, and Emergency Procedures' in the current version of NUREG-1556, Volume 4, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses.'

Leak Tests - 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 authorized by the NRC or an Agreement State to provide leak testing services to other licensees or using a leak test kit supplied by an organization authorized by the NRC or an Agreement State to provide leak test kits to other licensees and according to the kit supplier's instructions. Records of leak test results will be maintained.

Maintenance - We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's or distributor's written recommendations and instructions. The gauge manufacturer, distributor, or other person authorized 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 service, and disposal of sealed sources.

Transportation - Need not be submitted with application.

Fixed Gauges Used at Temporary Job Sites - We will not use fixed gauges at temporary job sites.

Security Program - Need not be submitted with application.

11. Waste Management – Gauge Disposal and Transfer - Need not be submitted with application.