



DEPARTMENT OF THE ARMY  
HEADQUARTERS, U.S. ARMY 20TH CBRNE COMMAND  
(CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, EXPLOSIVES)  
2400 21ST STREET  
ABERDEEN PROVING GROUND, MD 21010-5424

AFCB-CS

8 April 2016

MEMORANDUM FOR Mr. Scott Wilson, Health Physicist, US Nuclear Regulatory Commission Region I, 2100 Renaissance Boulevard, Suite 100, King of Prussia, PA 19406-2713

SUBJECT: License No. 19-31127-01, Docket 03037133

1. References:

a. Memorandum, NRC, 10 Feb 16, subject: Licensing Amendment Request to US Nuclear Regulatory Commission Materials License 19-31127-01, Docket No. 030-37133.

b. Email from you, 31 Mar 16, subject: Request for Additional Information Regarding License Amendment; License No.: 19-31127-01; Docket No. 03037133; Control No. 590301.

c. Telephone conversation between Mr. B. Scott Davidson, Risk Management, and you, 1 Apr 16, subject: Licensing Amendment Request to US Nuclear Regulatory Commission Materials License 19-31127-01, Docket No. 030-37133.

2. The following are our responses to your inquiries:

a. **NRC:** Title 10 CFR 30.32(g), in part, states for byproduct material that you must provide the manufacturer and model number of the sources as registered in the sealed source or device registry. Several alternate forms of information can be provided as stated in the section of that regulation. The following sources could not be identified in the list: Americium-241 Model PHI-241 (Note: There is a Model PHI-241 GFS); Americium-241 DuPont Model No. NES-128S and Amersham Source No. 72658-1; Americium-241 no source model number given; and Radium-226, no source model number given. Please provide the manufacturer and model number for these sources as registered in the sealed source and device registry or provide the alternative information as stated in the associated sections of 10 CFR 30.32(g). Note that alpha emitting sources of less than 10 microcuries only need the manufacturer, model number, and amount of activity for the sources you possess.

**Response:** The information on items 6.L, 6.M, 6.N and 6.O was all we were able to obtain for the byproduct material requested. We are unable to provide manufacturer or model information for items 6.M, 6.N or 6.O. The information on the two Am-241 sources in item 6.L includes the model number (NES-128S) and physical description of

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the source for the nominal 6 uCi (DuPont) source, and product code, source number, drawing number and a statement of conformance to ISO for the design of the 11 uCi (Amersham) source. If this information is insufficient to support adding these sources to the license we withdraw the request for them.

Americium Model PHI-241 is shown on two Eckert & Ziegler Nominal Source Certificates and correspond to item 6.I currently on NRC Materials License 19-31127-01. Those certificates are attached.

b. **NRC:** There are multiple locations of use on the license. Please provide enough information for an inspector to located personnel who are in response for the material on site. Command name, general telephone number, and address within the complex.

**Response:**

The following table provides the information requested:

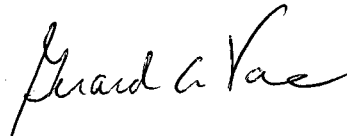
Command Name	General Phone Number	Address within Complex
US Army 20th CBRNE Command Analytical and Remediation Activity (CARA)	410-436-9259	2433 Dirk Drive Aberdeen Proving Ground (APG), MD
US Army 20th CBRNE Command, Nuclear Disablement Team (NDT), APG, MD	410-278-9371	Building 4118, APG, MD
US Army 110th Chemical Battalion (CM BN)	253-967-9846	Bldg. 12931 Joint Base Lewis-McChord, WA
US Army 759th Ordnance Company (OD CO) (Explosive Ordnance Disposal (EOD))	760-380-2793	Bldg. 6111, National Training Center, Fort Irwin, CA
US Army 705th OD CO (EOD)	337-531-5502	7401 F Ave. Fort Polk, LA
US Army 2D CM BN, 68th Chemical Company (CM CO) (TEU)	254-285-5497	37th ST and BN Ave Bldg. 14024 Fort Hood, TX

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22D CM BN 46th CM CO (TEU)	915-744-3714 915-744-3713	Bldg 20107 Kasserine Way, Fort Bliss, TX
US Army 83D CM BN 25th CM CO (TEU)	912-435-0699 912-223-2626	1915 W 15th Street, Bldg 3016 Fort Stewart, GA
CARA-Rapid Remediation West (RRW)	870-540-2311	10020 Kabrich Circle Pine Bluff, AR
CARA-RRW	870-556-2010 870-540-2316	CARA Operations Bldg 5671 Stewart Road Redstone Arsenal, AL

3. The point of contact for this response is Mr. Scott Davidson, (410) 436-9643, email [barry.s.davidson.civ@mail.mil](mailto:barry.s.davidson.civ@mail.mil).

FOR THE COMMANDER:



Enclosure

GERARD A. VAVRINA  
Colonel, MS  
Chief of Staff



**Eckert & Ziegler**  
Isotope Products

24937 Avenue Tibbitts  
Valencia, California 91355

Tel 661-309-1010  
Fax 661-257-8303

# NOMINAL SOURCE CERTIFICATE

Customer: Battelle Energy Alliance  
Purchase Order No.: 00152421  
Model No.: PHI-241  
Catalog No.: AM132010500U  
Capsule Type: A3201-3  
Active Diameter: 0.21" (5.33 mm)  
Cover: Stainless Steel  
Backing: Stainless Steel

Certificate Date: 22-Dec-14  
Quantity: 1  
SS&DR No.: CA0406S118S  
ISO/ANSI Classification: ANSI 77C66545  
Special Form No.: USA/0515/S-96 Rev 3  
Nuclide Half Life: 432.17 ± 0.66 years  
Recommended Working Life: 15 years

Nuclide	Source No.	Activity	Radiation Output	Reference Date
Am-241	M2-122	500 µCi (18.5 MBq)	Not Applicable	1-Jan-15

Impurities: None detected.

Leak Test Information is on Reverse Side:

- Remarks:
- This document uses the numerical convention where 1.000 = 1 and 1,000 = 10<sup>3</sup>.
  - Nuclear data were taken from IAEA-TECDOC-619, 1991.
  - ANSI classification is equivalent to ISO2919.

Scott Mah  
Name



Signature

22 Dec 14  
Date

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ISO 9001 CERTIFIED

Medical Imaging Laboratory  
24937 Avenue Tibbitts Valencia, California 91355

Industrial Gauging Laboratory  
1800 North Keystone Street Burbank, California 91504

Encl



**Eckert & Ziegler**  
Isotope Products

24937 Avenue Tibbitts  
Valencia, California 91355

Tel 661-309-1010  
Fax 661-257-8303

# NOMINAL SOURCE CERTIFICATE

Customer: Battelle Energy Alliance  
Purchase Order No.: 00152421  
Model No.: PHI-241  
Catalog No.: AM13201/30100U  
Capsule Type: A3201-3  
Active Diameter: 0.21" (5.33 mm)  
Cover: Stainless Steel  
Backing: Stainless Steel

Certificate Date: 05-Dec-14  
Quantity: 1  
SS&DR No.: CA0406S118S  
ISO/ANSI Classification: ANSI 77C66545  
Special Form No.: USA/0515/S-96 Rev 3  
Nuclide Half Life: 432.17 ± 0.66 years  
Recommended Working Life: 15 years

Nuclide	Source No.	Activity	Radiation Output	Reference Date
Am-241	M2-129	100 µCi (3.7 MBq)	Not Applicable	1-Jan-15

Impurities: None detected.

Leak Test Information is on Reverse Side:

Remarks: - This document uses the numerical convention where 1.000 = 1 and 1,000 = 10<sup>3</sup>.  
- Nuclear data were taken from IAEA-TECDOC-619, 1991.  
- ANSI classification is equivalent to ISO2919.

Matthew Dey  
Name

  
Signature

17 Dec 14  
Date

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ISO 9001 CERTIFIED

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24937 Avenue Tibbitts Valencia, California 91355

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