

30-37925

June 7, 2019

Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission

DEWATERING SYSTEM NUCLEAR DENSITY GAUGE SOURCE TRANSFER – TVA SHAWNEE
FOSSIL PLANT TO TVA CUMBERLAND FOSSIL PLANT – GENERAL LICENSED DEVICES

On May 21, 2019; (2) nuclear density gauge sources, contained in source holders, located at TVA Shawnee Fossil Plant were transferred to TVA Cumberland Fossil Plant. The sources were delivered and accepted by TVA Radiation Safety on May 22, 2019 and transferred under License No. 41-25219-01.

The nuclear density gauge source information is indicated below:

Nuclear Gauge Serial Number	Radioisotope/ Quantity/ Assay Date	Gauge Manufacturer / Model Number	Shutter On/Off Mechanism Status
0076/13	Cs-137 / 30 mCi / 9-1-2013	Berthold Technologies/ LB 7440-F-CR	Locked by manufacturer
0104/13	Cs-137 / 30 mCi / 9-1-2013	Berthold Technologies/ LB 7440-F-CR	Locked by manufacturer

The new permanent storage location will be:

Tennessee Valley Authority
TVA Cumberland Fossil Plant
815 Cumberland City Road
Cumberland City, TN 37050

Owner: W. Lee Cain (256) 386-2304
Under License No. 41-25219-01

Respectfully,



W. Lee Cain
Radiation Safety Officer

Tennessee Valley Authority
1010 Reservation Road
Complex H
Muscle Shoals, AL 35662
(256) 386-2304

NMSS10

**TENNESSEE VALLEY AUTHORITY
RADIOACTIVE MATERIAL SHIPMENT RECORD**

Consignee License No. 41-25219-01 License on file and verified? Yes

TO: Tennessee Valley Authority
TVA Cumberland Fossil Plant
Attn: W. Lee Cain (256) 386-2304
815 Cumberland City Road
Cumberland City, TN 37050

From: Tennessee Valley Authority
TVA Shawnee Fossil Plant
7900 Metropolis Lake Road
West Paducah, KY 42086
Contact: W. Lee Cain (256) 386-2304

*** 24-HOUR EMERGENCY PHONE NUMBER: 1-800-237-2322 ***

SHIPMENT TOTALS:

No. of Packages	Total Weight or Volume	Total Activity
2	81.6 Kg (180 Lbs)	2.22E+03 MBq (6.00E+01 mCi)

CONTAINER INFORMATION:

Item No.	U.S. Department of Transportation Description	Radionuclide(s)	Total Package Activity	Weight or Volume	Physical and Chemical Form	Type Package	DOT Label	TI	DOT or NRC Package Approval No.
Drum 1	UN3332, Radioactive material, Type A package, special form, 7 (1) Metal Drum Nuclear Density Gauge	Cs-137	1.11E+03 MBq	40.8 Kg (90 Lbs)	Solid/ Silicate Material	Type A	YELLOW-II	0.1	NA
Drum 2	UN3332, Radioactive material, Type A package, special form, 7 (1) Metal Drum Nuclear Density Gauge	Cs-137	1.11E+03 MBq	40.8 Kg (90 Lbs)	Solid/ Silicate Material	Type A	YELLOW-II	0.1	NA

Shipment No.: RSS 19-015

Shipment Date: 05/21/2019

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Remarks: Smearable outside containers:

Beta/Gamma: <16.67 Bq/100 cm² or <1000 dpm/100 cm²; Alpha: < 0.33 Bq/100 cm² or <20 dpm/100 cm²

Dose Rates outside shipping containers:

Drum 1 = 0.005 mSv/hr or 0.5 mrem/hr

Drum 2 = 0.005 mSv/hr or 0.5 mrem/hr

"This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation."

Is this an "Exclusive Use" shipment? No

Shipment prepared by:  W. Lee Cain (Rad Shipper) 05/21/2019



Eckert & Ziegler

Isotope Products

24937 Avenue Tibbitts
Valencia, California 91355

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

NOMINAL SOURCE CERTIFICATE

Customer: Berthold Technologies USA LLC

Purchase Order No.: EZ062013

Model No.: Cs7.P02

Catalog No.: HEG-0301

Capsule Type: Cs7.P02

Active Diameter: 0.125" (3.18 mm)

Cover: Stainless Steel

Backing: Stainless Steel

Certificate Date: 07-Aug-13

Quantity: 1

SS&DR No.: CA0406S227S

ISO/ANSI Classification: ISO/99/C66646

Special Form No.: CZ/1006/S-96 Rev 1

Nuclide Half Life: 30.17 ± 0.16 years

Recommended Working Life: 15 years

Nuclide	Source No.	Activity	Radiation Output	Reference Date
Cs-137	0076/13	30 mCi (1.11 GBq)	Not Applicable	1-Sep-13

Impurities: Not determined.

Leak Test Information is on Reverse Side:

Remarks: - This document uses the numerical convention where 1.000 = 1 and 1,000 = 10³.
 - Nuclear data were taken from IAEA-TECDOC-619, 1991.

B. Scott Crowell

Name

Signature

7 AUG 13

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



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Nuclide	Source No.	Activity	Radiation Output	Reference Date
Cs-137	0104/13	30 mCi (1.11 GBq)	Not Applicable	1-Sep-13

Impurities: Not determined.

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