

<div>FORM 540</div> <div>EnergySolutions, LLC</div> <div>UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER</div>		5. SHIPPER -- NAME AND FACILITY Cabrera Services for GE/UNC 71 Shelton Ave. New Haven, CT 06511				SHIPPER I.D. NUMBER GE/UNC 17-05		7. FORM 540 AND 540A FORM 541 AND 541A FORM 542 AND 542A ADDITIONAL INFORMATION			8. MANIFEST NUMBER (Use this number on all continuation pages)  7321-01-0097									
						<input type="checkbox"/> COLLECTOR		PAGE 1 OF 1 PAGE(S) 1 PAGE(S) None PAGE(S) None PAGE(S)												
						<input type="checkbox"/> PROCESSOR														
1. EMERGENCY TELEPHONE NUMBER 800-424-9300				Utah Generator Site Access Permit No. 0209001622		SHIPMENT NUMBER na		<input checked="" type="checkbox"/> GENERATOR TYPE (Specify) FC		9. CONSIGNEE - Name and Facility EnergySolutions, LLC Clive Disposal Site (Bulk Waste Facility) Interstate 80, Exit 49 Clive, UT 84029										
ORGANIZATION Chemtrec contract # CCN3584				CONTACT Wade Fillingame				TELEPHONE NUMBER (Include Area Code) 865-300-5789												
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST =====> 1		6. CARRIER -- Name and Address Greenfield Logistics 8731 Sandy Parkway Suite 107 Sandy, UT 84070				EPA I.D. NUMBER UTR000005728		10. CERTIFICATION  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. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.										
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number =====>		EPA MANIFEST NUMBER		CONTACT Shane Johansen				SHIPPING DATE 06/12/2017												
				SIGNATURE -- Authorized carrier acknowledging waste receipt				TELEPHONE (Include Area Code) 801-676-1575		SIGNATURE -- Authorized consignee acknowledging waste receipt		DATE								
								DATE		AUTHORIZED SIGNATURE		TITLE		DATE						
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)				12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY MBq mCi		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
RQ, UN 3077, Environmentally Hazardous Substance, solid, nos, 9, III (Asbestos) soil and debris				NA		na		Solid Oxides		U-234 U-235 U-238			2.1835E+01 (5.9013E-01)		NA		31580 LBS; 486 FT3		GFLU002008	
FOR CONSIGNEE USE ONLY						20. TERMS AND CONDITIONS														
____ Record Waste Description Inadequate						A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material __ is (or) <input checked="" type="checkbox"/> is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1.														
____ Contamination or Leakage Detected						B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC														
____ Unexpected Exposure Rates Detected						C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license.														
____ Labels, Markings, etc. Inadequate						D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST,) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.														
____ Container Integrity Inadequate																				
____ Other																				
____ No Violations Detected on this Shipment																				

FORM 541

EnergySolutions, LLC

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS

NET WASTE VOLUME

NET WASTE WEIGHT

SPECIAL NUCLEAR MATERIAL (grams)

U-233

U-235

Pu

Total

1

m313.7620

kg10967.8642

NP

1.9100E+00

NP

1.9100E+00

ft3486.0000

ton12.0900

ACTIVITY

SOURCE (kg)

MBq

2.1835E+01

NP

NP

NP

NP

(kg)

4.0738E-02

mCi

5.9013E-01

NP

NP

NP

NP

(tons)

4.4906E-05

2. MANIFEST NUMBER

7321-01-0097

3. PAGE 1 OF 1 PAGE(S)

4. SHIPPER NAME

Cabrera Services for GE/UNC

SHIPMENT ID NUMBER

GE/UNC 17-05

5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)

6. CONTAINER DESCRIPTION

7. VOLUME

8. WASTE AND CONTAINER WEIGHT

9. SURFACE RADIATION LEVEL

10. SURFACE CONTAMINATION

11. WASTE DESCRIPTOR

12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER

13. SOLIDIFICATION OR STABILIZATION MEDIA

14. CHEMICAL DESCRIPTION

15. RADIOLOGICAL DESCRIPTION

16. WASTE CLASSIFICATION

(m3)

(ft3)

(kg)

(ton)

(mSv/hr)

(mrem/hr)

ALPHA

BETA-GAMMA

(See Note 1 & Note 1A)

<1.0000E-03

<0.0000

<0.0000

<1.0000E-01

<100.0000

<1000.0000

29,22-HJL

13.7620

100100

Oxides/none

na

U-234[9.2289E-05 kg]

U-235[1.9100E+00 g]

U-238[4.0645E-02 kg]

Subtotal

Total

SNM[1.9100E+00 g]

Source[4.0738E-02 kg]

5.21700E+01

2.1171E+01

5.7219E-01

4.1239E-03

1.3819E-02

2.1835E+01

5.9013E-01

AU

13.7620

14324.4480

15.7900

13.7620

14324.4480

15.7900

Shipment Totals

13.7620

14324.4480

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Note 1: Container Description Codes. For containers/ waste requiring disposal in approved structural over-packs the numerical code must be followed by "-OP."

1. Wooden Box or Crate

2. Metal Box

3. Plastic Drum or Pail

4. Metal Drum or Pail

5. Metal Tank or Liner

6. Concrete Tank or Liner

7. Polyethylene Tank or Liner

8. Fiberglass Tank or Liner

9. Demineralizer

10. Gas Cylinder

11. Bulk, Unpackaged Waste

12. Unpackaged Components

13. High Integrity Container

19. Other. Describe in Item 6, or additional page

Note 1A: Bulk Packaging Description Codes. (Choose one code as may be applicable.)

A Gondola

B Intermodal

C End-Dump

D Roll-off

E Seavan

NOTE 2: Waste Descriptor Codes. (Choose up to three which predominate by volume.)

20. Charcoal

21. Incinerator Ash

22. Soil

23. Gas

24. Oil

25. Aqueous Liquid

26. Filter Media

27. Mechanical Filter

28. EPA or State Hazardous

29. Demolition Rubble

30. Cation Ion-exchange Media

31. Anion Ion-exchange Media

32. Mixed Bed Ion-exchange Media

33. Contaminated Equipment

34. Organic Liquid (except oil)

35. Glassware or Labware

36. Sealed Source/Device

37. Paint or Plating

38. Evaporator Bottoms/Sludges/ Concentrates

39. Compactible Trash

40. Noncompactible Trash

41. Animal Carcass

42. Biological Material (except animal carcass)

43. Activated Material

59. Other. Describe in item 11, or additional page

NOTE 2A: Specific Waste Descriptions (Choose all applicable codes.)

G Dewatered

H Solid

I Combustible

J Non-combustible

K Air Filtration Filters

L Asbestos

Note3: Solidification and Stabilization Media Codes. (Choose up to three which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S," and the media vendor and brand name must also be identified

in Item 13. Code 100=NONE REQUIRED.

Solidification

90. Cement

91. Concrete

(encapsulation)

92. Bitumen

93. Vinyl Chloride

94. Vinyl Ester Styrene

99. Other. Describe in item 13, or additional page

100. None Required.

FORM 541 (03-06)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST  
ISOTOPES REPORT

For Manifest # 7321-01-0097  
EnergySolutions, LLC

<u>Isotope</u>	Total Activity	
	<u>(MBq)</u>	<u>(mCi)</u>
U-234	2.1171E+01	5.7219E-01
U-235	1.5258E-01	4.1239E-03
U-238	5.1132E-01	1.3819E-02