

FORM 541 UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST CONTAINER AND WASTE DESCRIPTION Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste	EMC	1. MANIFEST TOTALS						2. MANIFEST NUMBER USA 2006-044-EMC	
		NUMBER OF PACKAGES/DISPOSAL CONTAINERS	NET WASTE VOLUME	NET WASTE WEIGHT	SPECIAL NUCLEAR MATERIAL (grams)			TOTAL	3. PAGE 1 OF 1 PAGE(S)
					U-233	U-235	Pu		
		1	m3 0.2124 R3	kg 7.5000	28-4835 75-0000	NP	NP	NP	NP
ACTIVITY							SOURCE		
	ALL NUCLIDES	TRITIUM	C-14	To-99	I-129		(kgs)	1.2800E-01	SHIPMENT ID NUMBER USA 2006-044-EMC
	MBq	NP	NP	NP	NP		(lbs)	2.7778E-01	

DISPOSAL CONTAINER DESCRIPTION				WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER										16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C		
5. CONTAINER IDENTIFICATION NUMBER / none	6. CONTAINER DESCRIPTION (See Note 1 & Note 1A)	7. VOLUME (m3) (R3)	8. WASTE AND CONTAINER WEIGHT (kg) (lb)	9. SURFACE RADIATION LEVEL (mSv/hr) (mrem/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) (dpm/100 cm2)		11. WASTE DESCRIPTOR (See Note 2 & Note 2A)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3) (FT3)		13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3 & Note 3A)	14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION			
					ALPHA	BETA-GAMMA		WEIGHT %	CHEMICAL FORM/ CHELATING AGENT		INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT					
G-1/EAMC Bldg 300 NP Support 3806 Fl. Gordon, GA 30905-5000	4	0.2124	34 75-4836	<5.000E-03	<1.6700E-06	<1.6700E-05	36-H 39-H	0.2124	100 100		oxide/np	Am-241	3.7000E-01	1.0000E-02	AU	
		7.5000	75-0000	<5.000E-01	<1.000E+02	<1.000E+03		7.5000				Ba-133	7.4000E-02	2.0000E-03		
												Co-67	8.8430E-01	2.3300E-02		
												Ce-137	4.4800E+00	4.0000E-02		
												Eu-152	8.8800E-03	2.4000E-04		
												Gd-153	3.0340E-01	8.2000E-03		
												I-125	2.9600E-01	8.0000E-03		
												Pb-210	3.7000E-02	1.0000E-03		
												U-238 [1.2800E-01 kgs]	1.5910E+00	4.3000E-02		
												Subtotal	5.0446E+00	1.3634E-01		
												Total	5.0446E+00	1.3634E-01		
												Source: [1.2800E-01 kgs]				
Shipment Totals		0.2124 7.5000	34 75-4835 75-0000	<5.000E-03 <5.000E-01								Source: [1.2800E-01 kgs]	5.0446E+00	1.3634E-01		

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

1. Wooden Box or Crate	9. Demineralizer
2. Metal Box	10. Gas Cylinder
3. Plastic Drum or Pail	11. Bulk, Unpackaged Waste
4. Metal Drum or Pail	12. Unpackaged Components
5. Metal Tank or Liner	13. High Integrity Container
6. Concrete Tank or Liner	19. Other. Describe in item 6 or additional page.
7. Polyethylene Tank or Liner	
8. Fiberglass Tank or Liner	

Note 1A: Barnwell Specific Container Description Codes. (Choose one code as may be applicable.)

A High Integrity Container - Poly
B High Integrity Container - Poly with Steel Shell
C High Integrity Drum Overpack - Poly
D High Integrity Container - Stainless Steel
E High Integrity Container - Fiberglass
F Liner - Steel

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

20. Charcoal	29. Demolition Rubble	38. Evaporator Bottoms/Sludges/Concentrates
21. Incinerator Ash	30. Cation Ion-exchange Media	39. Compressible Trash
22. Soil	31. Anion Ion-exchange Media	40. Noncompressible Trash
23. Gas	32. Mixed Bed Ion-exchange Media	41. Animal Carcass
24. Oil	33. Contaminated Equipment	42. Biological Material (except animal carcass)
25. Aqueous Liquid	34. Organic Liquid (except oil)	43. Activated Material
26. Filter Media	35. Glassware or Labware	59. Other. Describe in item 11, or additional page
27. Mechanical Filter	36. Sealed Source/Device	
28. EPA or State Hazardous	37. Paint or Plating	

Note 2A: Barnwell Specific Waste Descriptor Codes. (Choose all applicable codes.)

G Depleted
H Solid
I Combustible
J Non-combustible
K Air Filtration Filters
L Asbestos

Note 3: 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.

90. Cement	94. Vinyl Ester Styrene
91. Concrete	99. Other. Describe (encapsulation) in item 13, or additional page
92. Bitumen	100. None Required.
93. Vinyl Chloride	

Note 3A: Barnwell Specific Solidification and Stabilization Media Codes. (Choose this code if applicable.)

M Wax Binder

Shipper Inventory, Inspection, and Survey Form

Shipment No. USA 2006-044-EMC
 Facility Name. Fl. Gordon Med Ctr

Auth No. _____

Page 1 of 1

Drum No. G-1
 Radiation Level on container surface (mR/hr) < 0.5
 Radiation Level at one meter (mR/hr) < 0.5
 Radioactive contamination Level on container surface (dpm/100cm²) NDA
 Type of container, labels Metal Drum UN2910

WT. Kg. 30.34
 WT. Lbs. 66.75
 CuFL 7.50
 Drum size (gal) 55

EU
3.C

Nomen	Stock No.	Isotope	Qty	Source material Kg	Activity per item (mCi)	Total Activity per item (mCi)	Total Activity MBq
DAW		U-238	1	1.26E-01	4.30E-02	4.30E-02	1.59E+00
				1.26E-01	Total U-238	4.30E-02	1.59E+00
DAW	<i>G-1A</i>	Co-57	1		1.00E-03	1.00E-03	3.70E-02
Source Flood	S84001129-01	Co-57	1		1.89E-02	1.89E-02	6.99E-01
Source Vial	B0035	Co-57	1		3.90E-03	3.90E-03	1.44E-01
Source Vial	299D17-8	Co-57	1		1.00E-06	1.00E-06	3.70E-05
Source Vial	299D17-4	Co-57	1		1.00E-06	1.00E-06	3.70E-05
Source Button	W104977-1-7	Co-57	1		4.00E-05	4.00E-05	1.48E-03
Source Button	W104977-1-8	Co-57	1		4.00E-05	4.00E-05	1.48E-03
Source Button	W104977-1-9	Co-57	1		4.00E-05	4.00E-05	1.48E-03
					Total Co-57	2.39E-02	8.85E-01
Source	none	Gd-153	1		1.00E-03	1.00E-03	3.70E-02
Source Line	E260	Gd-153	1		3.80E-03	3.80E-03	1.33E-01
Source Line	E261	Gd-153	1		3.60E-03	3.60E-03	1.33E-01
					Total Gd-153	8.20E-03	3.03E-01
Source	SO1020022	Ca-137	1		4.00E-02	4.00E-02	1.48E+00
Source Rod	B-84-009	Ba-133	1		2.00E-03	2.00E-03	7.40E-02
Source	1Q833	Am-241	1		1.00E-02	1.00E-02	3.70E-01
Source Rod	424-29	Eu-152	1		2.40E-04	2.40E-04	8.88E-03
Source Seed	none	Pb-210	1		1.00E-03	1.00E-03	3.70E-02
Source Seed	none	I-125	8		1.00E-03	8.00E-03	2.96E-01

25 ~~0.25~~ ^{W³} **Total Drum** **1.36E-01** **5.05E+00**

0.126

Instrument type
 Ludlum 14C with Ludlum 44-38 / 44-9
 223644 PR 234799 / PR 235684

Cal Due date 12/12/2006

Inspected by Willie Bremer

Date loaded 11/29/2006

As Installation Radiation Safety Officer or designee, I certify, based on direct observation or performance, that the listed inventory is accurate and correct to the best of my knowledge, and no free standing liquids or hazardous materials (such as lead) are present.

Willie Bremer

11-29-06

Signature

Date