

<b>NRC FORM 540</b> (8-2010)  <b>U.S. NUCLEAR REGULATORY COMMISSION</b>  <b>UNIFORM LOW-LEVEL RADIOACTIVE</b>  <b>WASTE MANIFEST</b>  <b>SHIPPING PAPER</b>		5. SHIPPER - NAME AND FACILITY <b>Cabrera Services, Inc. for US Army, JMC</b> <b>DHS-NUSTL</b> <b>201 Varick St</b> <b>New York, NY 10014</b>				SHIPPER I.D. NUMBER <b>DHS/NUSTL-1</b>  <input type="checkbox"/> COLLECTOR <input type="checkbox"/> PROCESSOR <input checked="" type="checkbox"/> GENERATOR TYPE <i>(Specify)</i> <b>G</b>		7. NRC FORM 540 AND 540A PAGE 1 OF <b>2</b> PAGE(S) NRC FORM 541 AND 541A <b>3</b> PAGE(S) NRC FORM 542 AND 542A <b>None</b> PAGE(S) ADDITIONAL INFORMATION <b>None</b> PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) <b>DHS/NUSTL-1</b>			
1. EMERGENCY TELEPHONE NUMBER <i>(Include Area Code)</i> <b>NA</b>		USER PERMIT NUMBER <b>NA</b>		SHIPMENT NUMBER <b>WWF-DHS/NUSTL1</b>		9. CONSIGNEE - Name and Facility Address <b>TOXCO c/o Chase Environmental Gp</b> <b>109 Flint Rd</b> <b>Oak Ridge, TN 37830</b>		CONTACT <b>Janet Baker</b> TELEPHONE NUMBER <i>(Include Area Code)</i> <b>865-481-8801</b>					
ORGANIZATION <b>NA</b>		CONTACT <b>Wade Fillingame</b>		TELEPHONE NUMBER <i>(Include Area Code)</i> <b>865-300-5789</b>		SIGNATURE -- Authorized consignee acknowledging waste receipt		DATE <b>865-481-8801</b>					
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 =====> <b>3</b>		6. CARRIER - Name and Address <b>Chase Environmental Group</b> <b>109 Flint Rd</b> <b>Oak Ridge, TN 37830</b>		EPA I.D. NUMBER <b>na</b>		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 applicable 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  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		CONTACT <b>Janet Baker</b>		TELEPHONE NUMBER <i>(Include Area Code)</i> <b>865-481-8801</b>		AUTHORIZED SIGNATURE  TITLE  DATE					
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION <i>(Including proper shipping name, hazard class, UN ID number, and any additional information)</i>		12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY (MBq)	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME <i>(Use appropriate units)</i>	19. IDENTIFICATION NUMBER OF PACKAGE
<b>UN 2910, Radioactive material, excepted package-limited quantity of material, 7 - Contaminated Lead for decon and recycle</b>		<b>NA</b>		<b>na</b>	<b>Solid Oxides</b>		<b>Ac-228 Am-241 Ba-133 Bi-207 Cm-243 Cm-244 Cm-248 Co-60 Cs-134 Cs-137 Eu-154 H-3 Np-237 Pb-211 Pb-212 Pu-236 Pu-238 Pu-239 Pu-240 Ra-226 Sb-125 Sr-90 Th-229 Th-230 Th-232 Th-234 Tl-208 U-232 U-233 U-234 U-235 U-236 U-238</b>			<b>5.4684E-02</b>	<b>NA</b>	<b>1160 LBS; 7.5 FT3</b>	<b>Drum 2</b>
<b>UN 2910, Radioactive material, excepted package-limited quantity of material, 7 - Contaminated Lead for decon and recycle</b>		<b>NA</b>		<b>na</b>	<b>Solid Oxides</b>		<b>Ac-228 Am-241 Ba-133 Bi-207 Cm-243 Cm-244 Cm-248 Co-60 Cs-134 Cs-137 Eu-154 H-3 Np-237 Pb-211 Pb-212 Pu-236 Pu-238 Pu-239 Pu-240 Ra-226 Sb-125 Sr-90 Th-229 Th-230 Th-232 Th-234 Tl-208 U-232 U-233 U-234 U-235 U-236 U-238</b>			<b>5.4684E-02</b>	<b>NA</b>	<b>1160 LBS; 7.5 FT3</b>	<b>Drum 3</b>
FOR CONSIGNEE USE ONLY													

**UNIFORM LOW-LEVEL RADIOACTIVE  
WASTE MANIFEST  
SHIPPING PAPER (CONTINUATION)**

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)	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
<b>UN 2910, Radioactive material, excepted package-limited quantity of material, 7 - Contaminated Lead for decon and recycle</b>	<b>NA</b>	<b>na</b>	<b>Solid Oxides</b>	<b>Ac-228</b>	<b>Am-241</b>	<b>Ba-133</b>	<b>Bi-207</b>	<b>Cm-243</b>	<b>Cm-244</b>	<b>5.4684E-02</b>	<b>NA</b>	<b>1160 LBS; 7.5 FT3</b>	<b>Drum1</b>
				<b>Cm-248</b>	<b>Co-60</b>	<b>Cs-134</b>	<b>Cs-137</b>	<b>Eu-154</b>	<b>H-3</b>				
				<b>Np-237</b>	<b>Pb-211</b>	<b>Pb-212</b>	<b>Pu-236</b>	<b>Pu-238</b>	<b>Pu-239</b>				
				<b>Pu-240</b>	<b>Ra-226</b>	<b>Sb-125</b>	<b>Sr-90</b>	<b>Th-229</b>	<b>Th-230</b>				
				<b>Th-232</b>	<b>Th-234</b>	<b>Tl-208</b>	<b>U-232</b>	<b>U-233</b>	<b>U-234</b>				
				<b>U-235</b>	<b>U-236</b>	<b>U-238</b>							

<b>NRC FORM 541</b> (8-2010)  <b>UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST</b>  <b>CONTAINER AND WASTE DESCRIPTION</b>  Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste	<b>1. MANIFEST TOTALS</b>						<b>2. MANIFEST NUMBER</b>								
	<b>SPECIAL NUCLEAR MATERIAL (grams)</b>						<b>DHS/NUSTL-1</b>								
			U-233		U-235		Pu		Total						
	<b>3</b>		<b>0.6372</b>		<b>1360.7772</b>		<b>1.9330E-07</b>		<b>4.0637E-05</b>		<b>1.4069E-07</b>		<b>4.0970E-05</b>		
						<b>ACTIVITY (MBq)</b>						<b>3 Containers</b>	<b>3 Containers</b>	<b>3 Containers</b>	<b>3 Containers</b>
ALL NUCLIDES			TRITIUM			C-14			Tc-99			I-129			SOURCE (kg)
<b>1.6405E-01</b>			<b>2.2644E-06</b>			<b>NP</b>			<b>NP</b>			<b>NP</b>			<b>6.3852E-06</b>
												<b>3. PAGE 1 OF 3 PAGE(S)</b>			
												<b>4. SHIPPER NAME</b> <b>Cabrera Services, Inc. for US Army, JMC</b>			
												<b>SHIPPER I.D. NUMBER</b> <b>DHS/NUSTL-1</b>			

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/GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m³)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL		10. SURFACE CONTAMINATION (MBq/100 cm²)		11. PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION		
				<input checked="" type="checkbox"/> (µSv/hr) <input type="checkbox"/> (mSv/hr)	ALPHA	BETA-GAMMA	11. WASTE DESCRIPTION (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m³)	13. SORBENT SOLIDIFICATION, STABILIZATION, MEDIA (See Note 3)	CHEMICAL FORM/CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT			
Drum 2/07-3081.01 DHS	4	0.2124	526.1672	<1.0000E+00	<1.6700E-06	<0.0000	59-SOLID	0.2124	100 100	Oxides/NA	na	Ac-228 Am-241 Ba-133 Bi-207 Cm-243 Cm-244 Cm-248 Co-60 Cs-134 Cs-137 Eu-154 H-3 Np-237 Pb-211 Pb-212 Pu-236 Pu-238 Pu-239 Pu-240 Ra-226 Sb-125 Sr-90 Th-229 Th-230 Th-232 Th-234 Tl-208 U-232 U-233 U-234	5.8090E-05 1.0952E-04 1.6206E-04 2.4901E-05 3.9960E-03 3.9960E-03 7.2520E-06 8.1030E-06 2.7972E-03 5.8090E-06 7.1410E-03 7.5480E-07 2.8379E-04 4.1070E-05 5.2170E-06 3.1746E-02 2.7343E-04 8.1030E-05 8.1030E-05 3.5927E-05 2.6270E-03 5.2170E-05 1.1766E-04 1.7390E-06 3.3596E-06 9.2870E-04 3.0118E-05 3.9960E-06 2.3125E-05 2.3125E-05	[1.6189E-09 g] [4.3471E-10 g] [3.5323E-08 g] [9.5217E-09 g] [1.5143E-11 kg] [2.2381E-12 kg] [8.2546E-07 kg] [1.0913E-15 kg] [6.4433E-08 g]	AU

**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 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. Compactible Trash
22. Soil	31. Anion Ion-exchange Media	40. Noncompactible 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	

**Note3: For solidification media that meet disposal site structural stability requirements, the numerical code must be followed by "-S." For all solidification media, the vendor (manufacturer) and brand name must also be identified in Item 13. Code 100=NONE REQUIRED.**

Sorption				Solidification			
60. Speedi Dri	64. Safe T Sorb	69. Chemsil 30	74. Petrosel	89. Other.	90. Cement	94. Vinyl Ester Styrene	
61. Celetom	65. Safe N Dri	70. Chemsil 50	75. Petrosel II	Describe in	91. Concrete	99. Other. Describe	
62. Floor Dry/ Superfine	66. Florco	71. Chemsil 3030	76. Aquaset	item 13, or	(encapsulation)	in item 13, or	
63. Hi Dri	67. Florco X	72. Dicapel HP200	77. Aquaset II	additional	92. Bitumen	additional page	
	68. Solid A Sorb	73. Dicapel HP500		page	93. Vinyl Chloride	100. None Required	

**UNIFORM LOW-LEVEL RADIOACTIVE  
WASTE MANIFEST**

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER  
**DHS/NUSTL-1**

**CONTAINER AND WASTE DESCRIPTION (CONTINUATION)**

3. PAGE 2 OF 3 PAGE(S)

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/GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m³)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL (µSv/hr) <input checked="" type="checkbox"/> (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm²)		11. PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION			15. RADIOLOGICAL DESCRIPTION	
					ALPHA	BETA-GAMMA	11. WASTE DESCRIPTION (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m³)	13. SORBENT SOLIDIFICATION STABILIZATION, MEDIA (See Note 3)	14. CHEMICAL FORM/CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%		INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	
												U-235 1.1026E-06 [1.3546E-05 g] U-236 1.1026E-06 U-238 1.6391E-05 [1.3029E-06 kg]		
												Total 5.4684E-02 MBq		
Drum 3/07-3081.01 DHS	4	0.2124	526.1672	<1.0000E+00	<1.6700E-06	<0.0000	59-SOLID	0.2124	100 100	Oxides/NA	na	Ac-228 5.8090E-05 Am-241 1.0952E-04 Ba-133 1.6206E-04 Bi-207 2.4901E-05 Cm-243 3.9960E-03 Cm-244 3.9960E-03 Cm-248 7.2520E-06 Co-60 8.1030E-06 Cs-134 2.7972E-03 Cs-137 5.8090E-06 Eu-154 7.1410E-03 H-3 7.5480E-07 Np-237 2.8379E-04 Pb-211 4.1070E-05 Pb-212 5.2170E-06 Pu-236 3.1746E-02 [1.6189E-09 g] Pu-238 2.7343E-04 [4.3471E-10 g] Pu-239 8.1030E-05 [3.5323E-08 g] Pu-240 8.1030E-05 [9.5217E-09 g] Ra-226 3.5927E-05 Sb-125 2.6270E-03 Sr-90 5.2170E-05 Th-229 1.1766E-04 [1.5143E-11 kg] Th-230 1.7390E-06 [2.2381E-12 kg] Th-232 3.3596E-06 [8.2546E-07 kg] Th-234 9.2870E-04 [1.0913E-15 kg] Tl-208 3.0118E-05 U-232 3.9960E-06 U-233 2.3125E-05 [6.4433E-08 g] U-234 2.3125E-05 U-235 1.1026E-06 [1.3546E-05 g] U-236 1.1026E-06 U-238 1.6391E-05 [1.3029E-06 kg]	AU	

**UNIFORM LOW-LEVEL RADIOACTIVE  
WASTE MANIFEST**  
CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

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/GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m³)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL	10. SURFACE CONTAMINATION (MBq/100 cm²)		11. PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION	15. RADIOLOGICAL DESCRIPTION			
				<input checked="" type="checkbox"/> (µSv/hr) <input type="checkbox"/> (mSv/hr)	ALPHA	BETA-GAMMA	11. WASTE DESCRIPTION (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m³)	13. SORBENT SOLIDIFICATION STABILIZATION, MEDIA (See Note 3)				WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT
												Total	5.4684E-02 MBq	
Drum1/07-3081.01 DHS	4	0.2124	526.1672	<1.0000E+00	<1.6700E-06	<0.0000	59-SOLID	0.2124	100 100	Oxides/NA	na	Ac-228 Am-241 Ba-133 Bi-207 Cm-243 Cm-244 Cm-248 Co-60 Cs-134 Cs-137 Eu-154 H-3 Np-237 Pb-211 Pb-212 Pu-236 Pu-238 Pu-239 Pu-240 Ra-226 Sb-125 Sr-90 Th-229 Th-230 Th-232 Th-234 Tl-208 U-232 U-233 U-234 U-235 U-236 U-238	5.8090E-05 1.0952E-04 1.6206E-04 2.4901E-05 3.9960E-03 3.9960E-03 7.2520E-06 8.1030E-06 2.7972E-03 5.8090E-06 7.1410E-03 7.5480E-07 2.8379E-04 4.1070E-05 5.2170E-06 3.1746E-02 [1.6189E-09 g] 2.7343E-04 [4.3471E-10 g] 8.1030E-05 [3.5323E-08 g] 8.1030E-05 [9.5217E-09 g] 3.5927E-05 2.6270E-03 5.2170E-05 1.1766E-04 [1.5143E-11 kg] 1.7390E-06 [2.2381E-12 kg] 3.3596E-06 [8.2546E-07 kg] 9.2870E-04 [1.0913E-15 kg] 3.0118E-05 3.9960E-06 2.3125E-05 [6.4433E-08 g] 2.3125E-05 1.1026E-06 [1.3546E-05 g] 1.1026E-06 1.6391E-05 [1.3029E-06 kg]	AU
												Total	5.4684E-02 MBq	