

<p><b>NRC FORM 541</b> (MM-YYYY)</p> <p style="text-align: center;"><b>U.S. NUCLEAR REGULATORY COMMISSION</b></p> <p style="text-align: center;"><b>UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST</b> <b>CONTAINER AND WASTE DESCRIPTION</b></p> <p style="text-align: center;">Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste</p> <p>Instructions: See NUREG/BR-0204 for detailed instructions for completing this form:  <a href="http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0204/">http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0204/</a></p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="7" style="text-align: center;">1. MANIFEST TOTALS</th> </tr> <tr> <th rowspan="2" style="width:8%;">NUMBER OF PACKAGES/ DISPOSAL CONTAINERS</th> <th rowspan="2" style="width:10%;">NET WASTE VOLUME (m<sup>3</sup>)</th> <th rowspan="2" style="width:10%;">NET WASTE WEIGHT (kg)</th> <th colspan="4" style="text-align: center;">SPECIAL NUCLEAR MATERIAL (grams)</th> </tr> <tr> <th style="width:10%;">U-233</th> <th style="width:10%;">U-235</th> <th style="width:10%;">Pu</th> <th style="width:10%;">TOTAL</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <th colspan="6" style="text-align: center;">ACTIVITY (MBq)</th> <th rowspan="2" style="text-align: center;">SOURCE (kg)</th> </tr> <tr> <th style="width:25%;">ALL NUCLIDES</th> <th style="width:10%;">TRITIUM</th> <th style="width:10%;">C-14</th> <th style="width:10%;">Tc-99</th> <th style="width:10%;">I-129</th> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	1. MANIFEST TOTALS							NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME (m <sup>3</sup> )	NET WASTE WEIGHT (kg)	SPECIAL NUCLEAR MATERIAL (grams)				U-233	U-235	Pu	TOTAL								ACTIVITY (MBq)						SOURCE (kg)	ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129									<p>2. MANIFEST NUMBER</p> <hr/> <p>3. PAGE _____ OF _____ PAGE(S)</p> <hr/> <p>4. SHIPPER NAME</p> <hr/> <p>SHIPPER I.D. NUMBER</p>
1. MANIFEST TOTALS																																															
NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME (m <sup>3</sup> )	NET WASTE WEIGHT (kg)	SPECIAL NUCLEAR MATERIAL (grams)																																												
			U-233	U-235	Pu	TOTAL																																									
ACTIVITY (MBq)						SOURCE (kg)																																									
ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129																																											

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 (m <sup>3</sup> )	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL		10. SURFACE CONTAMINATION MBq/100cm <sup>2</sup>		11. PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION			15. RADIOLOGICAL DESCRIPTION	
				<input 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	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		

**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/Slud ges/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	

**NOTE 3: 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.**

<b>Sorption</b>		<b>Solidification</b>	
60. Speedi Dri	64. Safe T Sorb	69. Chemsil 30	74. Petroset
61. Celetom	65. Safe N Dri	70. Chemsil 50	75. Petroset II
62. Floor Dry/ Superfine	66. Florco	71. Chemsil 3030	76. Aquaset
63. Hi Dri	67. Florco X	72. Dicapri HP200	77. Aquaset II
	68. Solid A Sorb	73. Dicapri HP500	89. Other. Describe in item 13, or additional page
			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