

NRC FORM 541 (06-2020)	U.S. NUCLEAR REGULATORY COMMISSION  <b>UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST                  CONTAINER AND WASTE DESCRIPTION</b>  Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste  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>	<b>1. Manifest Totals</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">No. of Pkgs/ Disposal Containers</th> <th rowspan="2">Net Waste Volume (m<sup>3</sup>)</th> <th rowspan="2">Net Waste Weight (kg)</th> <th colspan="4">Special Nuclear Material (grams)</th> <th rowspan="2">Source (kg)</th> </tr> <tr> <th>U-233</th> <th>U-235</th> <th>Pu</th> <th>Total</th> </tr> <tr> <td colspan="6" style="text-align: center;">Activity (MBq)</td> <td rowspan="2"></td> </tr> <tr> <td colspan="2">All Nuclides</td> <td>Tritium</td> <td>C-14</td> <td>Tc-99</td> <td>I-129</td> </tr> </table>	No. of Pkgs/ Disposal Containers	Net Waste Volume (m <sup>3</sup> )	Net Waste Weight (kg)	Special Nuclear Material (grams)				Source (kg)	U-233	U-235	Pu	Total	Activity (MBq)							All Nuclides		Tritium	C-14	Tc-99	I-129	<b>2. Manifest Number</b>  3. Page _____ of _____ Page(s)  <b>4. Shipper Name</b>  Shipper ID Number
No. of Pkgs/ Disposal Containers	Net Waste Volume (m <sup>3</sup> )	Net Waste Weight (kg)				Special Nuclear Material (grams)					Source (kg)																	
			U-233	U-235	Pu	Total																						
Activity (MBq)																												
All Nuclides		Tritium	C-14	Tc-99	I-129																							

Disposal Container Description						Waste Description for Each Waste Type in Container									
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. Waste Weight (kg)	10. Surface Radiation Level	11. Surface Contamination MBq/100 cm <sup>2</sup>		Physical Description			15. Chemical Description		16. Radiological Description	17. Waste Class AS-Class A Stable AU-Class A Unstable B-Class B C-Class C	
					<input type="checkbox"/> (µSv/hr) <input type="checkbox"/> (mSv/hr)	Alpha	Beta-Gamma	12. Waste Descriptor (See Note 2)	13. Approximate Waste Volume(s) in Container	14. 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 should be followed by "-OP."

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

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

20. Charcoal	31. Anion Ion-exchange Media	41. Animal Carcass
21. Incinerator Ash	32. Mixed Bed Ion-exchange Media	42. Biological Material (except animal carcass)
22. Soil	33. Contaminated Equipment	43. Activated Material
23. Gas	34. Organic Liquid (except oil)	59. Other. Describe in item 12, or additional page
24. Oil	35. Glassware or Labware	
25. Aqueous Liquid	36. Sealed Source/Device	
26. Filter Media	37. Paint or Plating	
27. Mechanical Filter	38. Evaporator Bottoms/ Sludges/Concentrates	
28. EPA or State Hazardous	39. Compactible Trash	
29. Demolition Rubble	40. Noncompactible Trash	
30. Cation Ion-exchange Media		

**NOTE 3: For solidification media that meet disposal site structural stability requirements, the numerical code should be followed by "-S."**  
 For all solidification media, the vendor (manufacturer) and brand name should also be identified in item 14. Code 100=NONE REQUIRED.

Sorption		Solidification
60. Speed Dri	67. Florco X	75. Petroset II
61. Celetom	68. Solid A Sorb	76. Aquaset
62. Floor Dry/ Superfine	69. Chemsil 30	77. Aquaset II
63. High Dri	70. Chemsil 50	78. Other. Describe in item 14, or additional page
64. Safe T Sorb	71. Chemsil 3030	79. Other. Describe in item 14, or additional page
65. Safe N Dri	72. Dicaperl HP200	80. None Required
66. Florco	73. Dicaperl HP500	
	74. Petroset	