


NRC FORM 541
(02-01-2023)



U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
CONTAINER AND WASTE DESCRIPTION

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:
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0204/>

1. Manifest Totals

No. of Pkgs/ Disposal Containers	Net Waste Volume (m ³)	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	

2. Manifest Number

3. Page _____ of _____ Page(s)

4. Shipper Name

Shipper ID Number

Disposal Container Description

5. Container Identification Number/Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m ³)	8. Waste and Container Weight (kg)	9. Waste Weight (kg)	10. Surface Radiation Level <div><input type="checkbox"/> (μSv/hr) <input type="checkbox"/> (mSv/hr)</div>	11. Surface Contamination MBq/100 cm ² <div>AlphaBeta-Gamma</div>	

Waste Description for Each Waste Type in Container

Physical Description			15. Chemical Description	16. Radiological Description	17. Waste Class	
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	AS-Class A Stable AU-Class A Unstable B-Class B C-Class C

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

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 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 12, or additional page

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

60. Speed Dri

61. Celetom

62. Floor Dry/ Superfine

63. High Dri

64. Safe T Sorb

65. Safe N Dri

66. Florco

67. Florco X

68. Solid A Sorb

69. Chemsil 30

70. Chemsil 50

71. Chemsil 3030

72. Dicaperl HP200

73. Dicaperl HP500

74. Petroset

75. Petroset II

76. Aquaset

77. Aquaset II

89. Other. Describe in item 14, or additional page

Solidification

90. Cement

91. Concrete (encapsulation)

92. Bitumen

93. Vinyl Chloride

94. Vinyl Ester Styrene

99. Other. Describe in item 14, or additional page

100. None Required

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