


NRC FORM 541
(MM-YYYY)



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

Instructions: 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 | | | | | | | 2. MANIFEST NUMBER |
|---|------------------------------------|-----------------------|----------------------------------|-------|-------|-------------|--------------------------------|
| NUMBER OF PACKAGES/ DISPOSAL CONTAINERS | NET WASTE VOLUME (m ³) | NET WASTE WEIGHT (kg) | SPECIAL NUCLEAR MATERIAL (grams) | | | | |
| | | | U-233 | U-235 | Pu | TOTAL | |
| | | | | | | | 3. PAGE _____ OF _____ PAGE(S) |
| ACTIVITY (MBq) | | | | | | SOURCE (kg) | 4. SHIPPER NAME |
| ALL NUCLIDES | | TRITIUM | C-14 | Tc-99 | I-129 | | SHIPPER I.D. 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. SURFACE RADIATION LEVEL <input type="checkbox"/> (μSv/hr) <input type="checkbox"/> (mSv/hr) | 10. SURFACE CONTAMINATION MBq/100cm ² ALPHA BETA-GAMMA |
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| 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 | |
|--|--|---|--------------------------------|------------------------------------|---|--|--|--|--|--|--|
| PHYSICAL DESCRIPTION | | | 14. CHEMICAL DESCRIPTION | | 15. RADIOLOGICAL DESCRIPTION | | | | | | |
| 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 | | | | | | |
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NOTE 1: Container Description Codes. For containers/waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP."

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|-------------------------------|---|
| 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.)

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|----------------------------|----------------------------------|--|
| 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.

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