

TABLE OF COMMERCIAL SPENT FUEL TRANSPORT CASKS

Certificate No./ Model No./ Certificate Holder	Cask Description - Materials of Construction, Approximate Dimensions, and Gross Weight	Cask Contents and Approximate Cavity Dimensions	Testing and Analysis Performed for Design Certification/ Comments
6346 and 9277 FSV-1 General Atomics and Chem-Nuclear Systems	Truck cask for Fort St. Vrain fuel. A stainless steel cask body, with depleted uranium shielding. The cask body is 528 centimeters (208 inches) in length and 71 centimeters (28 inches) in diameter. The dimensions of the package with the single impact limiter installed are 582 centimeters (229 inches) in length and 119 centimeters (47 inches) in diameter at the impact limiter. The gross weight is 21,600 kilograms (47,600 pounds).	The contents are 6 Fort St. Vrain fuel elements (hexagonal, graphite fuel elements). The cask cavity is 477 centimeters (188 inches) in length and 45 centimeters (18 inches) in diameter.	Analysis.
9001 IF-300 Chem-Nuclear Systems	Rail cask. A stainless steel cask body, with a depleted uranium shield and a water jacket for neutron shielding. The length of the cask is 533 centimeters (210 inches), and the diameter is 163 centimeters (64 inches). The impact limiters are stainless steel fins. The gross weight is 63,000 kilograms (140,000 pounds).	The contents are either 7 pressurized water reactor (PWR) fuel assemblies or 17 boiling water reactor (BWR) fuel assemblies. The cask cavity is 458 centimeters (180 inches) in length and 95 centimeters (38 inches) in diameter.	Analysis. Currently used in U.S.

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9010 NLI-1/2 NAC International	Truck cask. A stainless steel cask body, with a depleted uranium shield and a water jacket for neutron shielding. The dimensions of the cask without the balsa wood impact limiters are 496 centimeters (195 inches) in length and 120 centimeters (47 inches) in diameter. The dimensions of the cask with the impact limiters installed are 602 centimeters (237 inches) in length and 190 centimeters (75 inches) in diameter at the impact limiter. The gross weight is 22,300 kilograms (49,250 pounds).	The contents are 1 PWR fuel assembly, 2 BWR fuel assemblies, or 1 consolidated fuel canister. The cask cavity is 452 centimeters (178 inches) in length and 32 centimeters (13 inches) in diameter.	Analysis. Currently used in U.S.
9015 TN-8, TN-8L Transnuclear	Overweight truck cask. A stainless steel cask body, with lead shielding and solid resin neutron shielding. The dimensions of the package are 552 centimeters (217 inches) in length and 172 centimeters (68 inches) in diameter. The impact limiters are balsa and steel. The gross weight of the package is 36,000 kilograms (79,400 pounds).	The contents are 3 PWR fuel assemblies. The cask cavity consists of 3 stainless steel pressure vessels welded to an end plate and flange. Each cavity is 23 centimeters (9 inches) by 23 centimeters (9 inches) and 428 centimeters (169 inches) in length.	Drop tests of 1/4- and 1/2-scale packages; analysis.

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9016 TN-9 Transnuclear	Overweight truck cask. A stainless steel cask body, with lead shielding and solid resin neutron shielding. The dimensions of the package are 576 centimeters (226 inches) in length and 172 centimeters (68 inches) in diameter. The impact limiters are balsa wood and steel. The gross weight of the package is 36,000 kilograms (79,400 pounds).	The contents are 7 BWR fuel assemblies. The cask cavity consists of 3 stainless steel pressure vessels welded to an end plate and flange. The bays are divided into 7 square compartments. Each compartment is 15 centimeters (6 inches) by 15 centimeters (6 inches) and 452 centimeters (178 inches) in length.	Based on tests performed for the TN-9 (similarity of design) and analysis.
9023 NLI-10/24 NAC International	Rail cask. A stainless steel cask body, with lead and depleted uranium shielding and a water jacket for neutron shielding. The impact limiters are balsa and steel. The cask body is 519 centimeters (204 inches) in length and 244 centimeters (96 inches) in diameter. The gross weight is 88,000 kilograms (194,000 pounds).	The contents are 10 PWR or 24 BWR fuel assemblies. The cask cavity is 456 centimeters (180 inches) in length and 114 centimeters (45 inches) in diameter.	Static tests of scale-model impact limiters; analysis. Cask no longer used for transport.

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9200 125-B Department of Energy	Rail cask designed for core debris from Three Mile Island Unit 2. A stainless steel, lead-shielded cask equipped with impact limiters of rigid polyurethane foam encased in steel. The cask body is 527 centimeters (207 inches) in length and 166 centimeters (65 inches) in diameter. The overall dimensions of the package with the upper and lower impact limiters are 710 centimeters (280 inches) in length and 305 centimeters (120 inches) in diameter. The gross weight of the package is 82,300 kilograms (181,500 pounds).	The contents are 7 fuel canisters. The cask cavity is 489 centimeters (192 inches) in length and 130 centimeters (51 inches) in diameter.	Static tests of scale-model impact limiters; drop tests of 1/4-scale package; analysis.
9202 TN-BRP Department of Energy	Rail cask. A stainless steel cask equipped with steel-encased balsa and redwood impact limiters. The cask body is 484 centimeters (190 inches) in length and 211 centimeters (83 inches) in diameter. The dimensions of the package with the impact limiters are 620 centimeters (244 inches) in length and 332 centimeters (131 inches) in diameter. The gross weight of the package is 97,500 kilograms (215,000 pounds).	The contents are 85 BWR (Big Rock Point plant) fuel assemblies. The cask cavity is 434 centimeters (171 inches) in length and 163 centimeters (64 inches) in diameter.	Static and dynamic tests of 1/3-scale impact limiters; analysis. Single-trip cask.

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9206 TN-REG Department of Energy	Rail cask. A stainless steel cask equipped with steel-encased balsa and redwood impact limiters. The cask body is 457 centimeters (180 inches) in length and 229 centimeters (90 inches) in diameter. The dimensions of the package with the impact limiters are 594 centimeters (234 inches) in length and 333 centimeters (131 inches) in diameter. The gross weight of the package is 102,000 kilograms (225,000 pounds).	The contents are 40 PWR (R. E. Ginna plant) fuel assemblies. The cask cavity is 415 centimeters (163 inches) in length and 182 centimeters (72 inches) in diameter.	Based on tests performed for the TN-BRP (similarity of design) and analysis. Single-trip cask.
9225 NAC-LWT NAC International	Truck cask. A stainless steel, lead-shielded cask, with a water jacket for neutron shielding. The cask is equipped with steel-encased aluminum honeycomb impact limiters. The cask body is 508 centimeters (200 inches) in length and 112 centimeters (44 inches) in diameter. The dimensions of the package with the impact limiters are 590 centimeters (232 inches) in length and 165 centimeters (65 inches) in diameter. The gross weight of the package is 24,000 kilograms (52,000 pounds).	The contents are 1 PWR fuel assembly or 2 BWR fuel assemblies. The cask cavity is 452 centimeters (178 inches) in length and 34 centimeters (13 inches) in diameter.	Analysis.

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9226* GA-4 General Atomics	Truck cask. A stainless steel cask, with depleted uranium shielding and a solid resin neutron shield. The cask is equipped with steel-encased aluminum honeycomb impact limiters. The cask body is 478 centimeters (188 inches) in length and 102 centimeters (40 inches) in diameter. The dimensions of the package with the impact limiters are 594 centimeters (234 inches) in length and 229 centimeters (90 inches) in diameter. The gross weight of the package is 25,000 kilograms (55,000 pounds).	The contents are 4 PWR fuel assemblies. The cask cavity is 46 centimeters (18 inches) by 46 centimeters (18 inches) and 424 centimeters (167 inches) in length.	Static tests of 1/4-scale impact limiters; drop tests of 1/2-scale package; analysis.
9235* NAC-STC NAC International	Rail cask - dual-purpose system (storage and transport). A stainless steel, lead-shielded cask, with a solid polymer neutron shield. The cask is equipped with steel-encased balsa and redwood impact limiters. The cask body is 490 centimeters (193 inches) in length and 251 centimeters (99 inches) in diameter. The dimensions of the package with the impact limiters are 653 centimeters (257 inches) in length and 315 centimeters (124 inches) in diameter. The gross weight of the package is 113,000 kilograms (250,000 pounds).	The contents are 26 PWR fuel assemblies. The cask cavity is 419 centimeters (165 inches) in length and 180 centimeters (71 inches) in diameter.	Static tests of 1/8-scale impact limiters; drop tests of 1/4-scale package; analysis.

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9253 TN-FSV Department of Energy	Truck cask - dual-purpose system for Fort St. Vrain fuel in storage canisters. A stainless steel, lead-shielded cask. The cask is equipped with steel-encased balsa and redwood impact limiters. The cask body is 526 centimeters (207 inches) in length and 79 centimeters (31 inches) in diameter. The dimensions of the package with the impact limiters are 627 centimeters (247 inches) in length and 198 centimeters (78 inches) in diameter. The gross weight of the package is 21,000 kilograms (47,000 pounds).	The contents are 6 high-temperature, gas-cooled-reactor fuel elements. The cask cavity is 505 centimeters (199 inches) in length and 46 centimeters (18 inches) in diameter.	Static and dynamic tests of 1/2-scale impact limiters; analysis.
9255* NUHOMS MP187 Transnuclear West	Rail cask - dual-purpose system. A stainless steel, lead-shielded cask, with a cementitious material as a neutron shield. The cask is equipped with steel-encased foam and aluminum honeycomb impact limiters. The impact limiters are 322 centimeters (127 inches) by 322 centimeters (127 inches). The cask body is 508 centimeters (200 inches) in length and 236 centimeters (93 inches) in diameter. The length of the package with the impact limiters is 782 centimeters (308 inches). The gross weight of the package is 128,000 kilograms (282,000 pounds).	The contents are 24 PWR fuel assemblies. The cask cavity is 475 centimeters (187 inches) in length and 173 centimeters (68 inches) in diameter.	Static and dynamic tests of 1/4-scale impact limiters; analysis.

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9261* HI-STAR 100 System Holtec International	Rail cask - dual-purpose system. A stainless steel cask, with a solid polymer neutron shield. The cask is equipped with steel-encased aluminum honeycomb impact limiters. The cask body is 516 centimeters (203 inches) in length and 244 centimeters (96 inches) in diameter. The dimensions of the package with the impact limiters are 777 centimeters (306 inches) in length and 325 centimeters (128 inches) in diameter. The gross weight of the package is 128,000 kilograms (282,000 pounds).	The contents are 24 PWR or 68 BWR fuel assemblies. The cask cavity is 485 centimeters (191 inches) in length and 175 centimeters (69 inches) in diameter.	Static tests of 1/8-scale impact limiters; dynamic tests of 1/4-scale impact limiters; analysis.
9293* TN-68 Transnuclear	Rail cask - dual-purpose system. A stainless steel cask, with a solid resin neutron shield. The cask is equipped with steel-encased balsa and redwood impact limiters. The cask body is 500 centimeters (197 inches) in length and 250 centimeters (98 inches) in diameter. The dimensions of the package with the impact limiters are 688 centimeters (271 inches) in length and 366 centimeters (144 inches) in diameter. The gross weight of the package is 123,000 kilograms (272,000 pounds).	The contents are 68 BWR fuel assemblies. The cask cavity is 452 centimeters (178 inches) in length and 176 centimeters (69 inches) in diameter.	Static tests of scale-model impact limiters from similar design; drop tests of 1/3-scale package; analysis.

Note: Information derived from NRC Certificates of Compliance and applications for package approval.

* Cask designs most likely to be used for large shipping campaigns to a disposal facility.