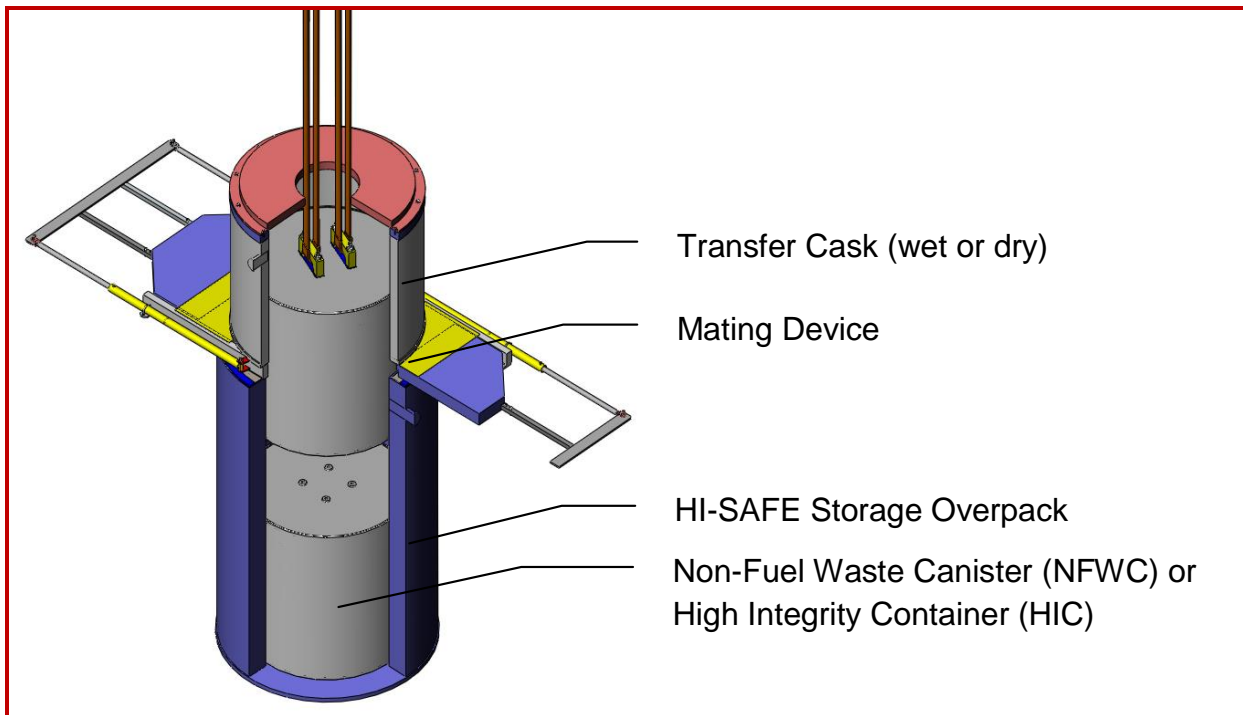


# HI-SAFE® Non-Fuel Waste Storage System



Holtec's HI-SAFE storage system provides an extremely safe and cost effective solution for on-site storage of non-fuel waste generated from operation and decommissioning of commercial nuclear power plants. The Non-Fuel Waste Canister (NFWC) features a stainless steel interior designed for storage and transport of nearly all waste types, including activated reactor internals, control components, sundry non-fissile materials, and operational waste, such as filters and resins. In addition, HI-SAFE is capable of storing High Integrity Containers (HICs) that may already be in use at the site for storage of resin and filter wastes. The waste containers can be stored inside Holtec's HI-SAFE overpack, which provides efficient radiological shielding and robust structural protection of the contained radioactive materials. HI-SAFE is designed in accordance with regulatory and industry guidelines for non-fuel waste storage and is engineered to maintain its integrity during severe accident events, natural disasters, and terrorist threats at any nuclear site in the United States or around the world.

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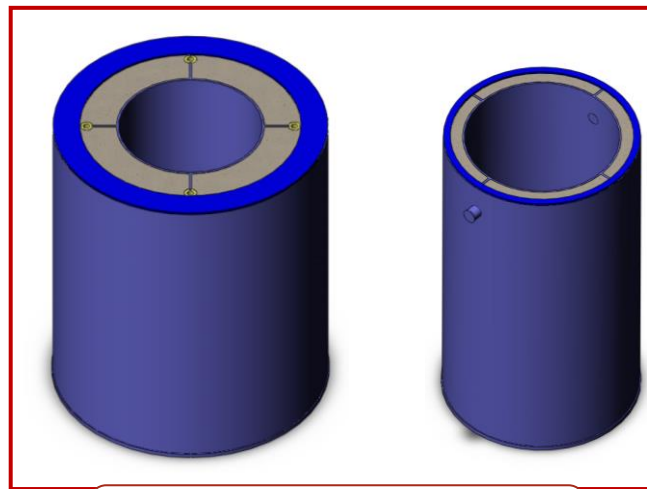


HI-SAFE is the non-fuel waste counterpart to Holtec's dry spent nuclear fuel storage system – HI-STORM. The HI-SAFE and HI-STORM systems are fully compatible, allowing current users to take advantage of existing ancillary equipment and infrastructure and new users to procure an integrated system for all spent fuel and non-fuel waste storage needs.

In storage, HI-SAFE can be placed either at an Independent Spent Fuel Storage Installation (ISFSI) alongside HI-STORMs or on separate storage pads designated for non-fuel waste<sup>1</sup>.

In summary:

- The HI-SAFE storage system provides robust, low-dose interim storage of non-fuel waste.
- The extent of shielding around the HI-SAFE storage system depends on the type of waste being stored.
- The Non-Fuel Waste Canister (NFWC) is designed for convenient and safe handling of any waste form and serves as an autonomous *waste package*.
- HI-SAFE can accommodate High Integrity Canisters (HICs) used for disposal of resin and filter waste that is either dewatered or solidified.
- The transfer cask (either HI-TRAC or a specially designed transfer cask for HICs) allows for seamless transfer of waste containers and minimizes radiation exposure to the crew. The transfer cask can be designed to support dry loading or loading in the spent fuel pool.
- Depending on the activity level of the waste, Holtec's HI-STAR dual-purpose (storage and transport) overpack can be used to transport the NFWC off-site.
- HI-SAFE is stored on-site at a Non-Fuel Waste Storage Facility (NSF), which consists of a concrete or gravel storage pad with appropriate security features (e.g., to comply with proposed 10 CFR 37 security requirements). GTCC waste can also be stored at an ISFSI.



HI-SAFE Overpacks with Variable Shielding (30 inches, 8 inches)

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<sup>1</sup> In the U.S., a Part 50 licensee is authorized to possess and store nuclear waste on the reactor site under the provisions of 10CFR 61.55. This authority is granted to Part 50 licensees under the general license provisions of 10 CFR 30 (for byproduct material) and 10 CFR 70 (for special nuclear material) because they are both necessarily a part of reactor operation. GTCC waste can also be stored at an ISFSI under 10 CFR 72. Like any other reactor-related radioactive waste, the licensee is required to ensure the waste is stored in containers and/or locations (e.g., the spent fuel pool) such that the dose to personnel is ALARA. Regulations of the relevant competent authority apply internationally.