

Spent nuclear fuel and its containment must be stored in a manner to be maintained, monitored and retrievable to prevent hydrogen gas explosions in both short and long-term storage and transport.

-- Nuclear Waste Technical Review Board (NWTRB) December 2017 Spent Nuclear Fuel Management report to Congress

- San Onofre thin-wall canisters cannot meet those requirements.
- Proposed storage sites in New Mexico and Texas cannot meet those requirements.
- Storage sites plan to return leaking canisters to sender.
- Each canister holds roughly a Chernobyl nuclear disaster.

Reasons to require thick casks

Safety Features	Thin canisters	Thick casks
Thick walls	1/2"- 5/8"	10"- 19.75"
Won't crack		✓
Ability to repair, replace seals		✓
Ability to inspect (inside & out)		✓
Monitor system prevents leaks		✓
ASME container certification		✓
Defense in depth (redundancy)		✓
Stored in concrete building		✓
Gamma & neutron protection	With concrete overpack	✓
Transportable w/o add'l cask		✓
Market leader	U.S.	World



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Holtec UMAX air vents in above ground lids

- Holtec lids have air vents that circulate radiation and corrosive air around the canisters and into the environment.
- Moist marine salts and other conditions can cause canisters to corrode and crack. Potash (potassium chloride) found in New Mexico, is also highly corrosive.
- A 2-year old Diablo Canyon canister has all conditions for cracking.
- Once a crack starts, it can grow through the wall in 16 years (NRC).
- Edison has no method to prevent or stop leaks or explosions yet continues to load canisters (73 Holtec canisters).
- Holtec President admits not feasible to repair, even if you could find cracks. He said even a microscopic through-wall crack will release millions of curies of radionuclides into the environment.



Areva NUHOMS air vents in concrete housing

- 51 canisters up to 15 years old already loaded (2003). One contains GTCC nuclear waste. An estimated 12 more canisters will be loaded with GTCC nuclear waste.
- Edison plans to stop reporting radiation levels from outlet air vents (where peak radiation levels would be from leaking canisters).
- Outlet air vents are on top of each concrete housing unit. The canisters are stored horizontally inside each concrete housing unit.
- Edison has not inspected for cracks because they cannot.
- Today's technology cannot inspect cracks, depth of cracks or repair canisters filled with spent nuclear fuel.

Share information with elected officials and others. The problem is now.

- Pending legislation will make the problem worse. It does not address these issues.
- The Nuclear Regulatory Commission (NRC) is ignoring these problems. *They even claim we do not have enough humidity at San Onofre for corrosion.*
- Cracking canisters cannot be transported.
- We need a hot cell (dry fuel handling facility) to replace thin canisters with thick-wall transportable storage casks.
- Store casks in buildings for additional environmental and security protection. *Thick casks survived Fukushima.*