**SNF Storage Q&A** [**www.nrc.gov**](http://www.nrc.gov)

# Spent Fuel Storage in Pools and Dry Casks - Key Points and Questions & Answers

On this page:

* [Questions and Answers – General](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#general)
  + [What is spent nuclear fuel?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#1)
  + [Why does spent fuel need to be cooled?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#2)
  + [Why not require real time radiation monitoring or EPA RadNet monitors around an independent spent fuel storage installation (ISFSI)?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#gen3)
  + [How are licensees required to fund dry storage facilities?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#gen4)
  + [What is high burnup fuel?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#gen5)
  + [Could high burnup fuel degrade in storage?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#gen6)
  + [What were the inspection results of the canisters located at the Diablo Canyon ISFSI?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#gen7)
* [Questions and Answers – Spent Fuel Pool Safety](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#pool-safety)
  + [What do you look at when you license a fuel storage facility? How do I know it can withstand a natural disaster?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#6)
  + [How do you know the fuel pools are safe? Does the NRC inspect these facilities, or just the reactor itself?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#7)
  + [What would happen to a spent fuel pool during an earthquake? How can I be sure the pool wouldn't be damaged?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#8)
  + [Can spent fuel pools leak?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#9)
  + [How would you know about a leak in such a large pool of water?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#10)
  + [How can operators get water back in the pool if there is a leak or a failure?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#11)
  + [Do U.S. nuclear power plants store their fuel above grade? Why is this considered safe?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#12)
  + [How are spent fuel pools kept cool? What happens if the cooling system fails?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#13)
  + [What keeps spent fuel from re-starting a nuclear chain reaction in the pool?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#14)
* [Questions and Answers – Dry Cask Safety](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry-cask)
  + [What is dry cask storage?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry3)
  + [What is an "ISFSI"?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry4)
  + [What kind of license is required for an ISFSI?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry5)
  + [How does the NRC determine that a dry storage system is safe?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry6)
  + [What are the requirements for the selection and use of a dry storage system at an NRC licensed commercial power reactor site?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry7)
  + [What Risk Assessments have been conducted for dry storage systems?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry8)
  + [How do the NRC requirements ensure that dry storage systems do not release radioactive material and expose workers and members of the public to radiation?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry9)
  + [How are dry storage systems inspected?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry10)
  + [What can remote visual testing be used to detect?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry11)
  + [How does the NRC conduct oversight of Licensees?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry12)
  + [How does the NRC verify that canisters are properly loaded in accordance with their NRC Certificate of Compliance?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry13)
  + [How can the fuel or internal components be inspected on canisters with welded lids?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry14)
  + [How would welded stainless steel canisters be repaired if necessary?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#dry15)
* [Questions and Answers – Waste Confidence & Future Plans](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#future)
  + [How long is spent fuel allowed to be stored in a pool or cask?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#20)
  + [What is the plan for storage of spent nuclear fuel going forward? Will on-site storage continue to be the way for the foreseeable future?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#21)
  + [These casks are already pretty old and could be storing spent fuel for decades to come. How can you protect them from deteriorating over time, especially from effects that have been seen at other nuclear installations such as alkali-silica reaction or chloride-induced stress corrosion cracking?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#22)
  + [How are the long-term impacts of onsite storage of spent fuel analyzed, and what measures are taken to minimize potential impacts on public health and safety?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#23)
  + [After a plant is decommissioned there will be no infrastructure to handle the repackaging of spent fuel if the storage systems need replacement. Is there a plan for this contingency, and what are the safety implications of reopening the storage cask?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#24)
* [Questions and Answers – Security](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#security)
  + [What about security? How do you know terrorists won't use all of this waste against us?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#25)
  + [How are dry storage systems canisters at ISFSIs protected against terrorism such as the September 11, 2001 terrorist attacks using hijacked airplanes?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#sec2)
* [Questions and Answers – Emergency Planning](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#emergency)
  + [Are potential seismic effects considered in the assessment of canisters for continued operation? –EP](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#27)
  + [What are the emergency plans for nuclear waste at an ISFSI in the case of mishandling, leaks, natural disasters or acts of terrorisms?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#28)
  + [What emergency plans are required for spent fuel storage facilities at nuclear power plants undergoing decommissioning or sites that have completed decommissioning?](https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#26)

[Index to all Frequently Asked Question Pages](https://www.nrc.gov/reading-rm/faqlist.html)