

Beyond Nuclear's Top Ten List
for Comments to DOE re: Irradiated Nuclear Fuel (High-Level Radioactive Waste)

1. **Stop making it.** The only truly safe, sound, just solution for the radioactive waste problem, is to not make it in the first place. [Electricity can be supplied by clean, safe, affordable renewable sources, such as wind and solar, and demand decreased significantly by efficiency](#), rather than generating radioactive waste via [dirty, dangerous, and expensive nuclear power](#).
2. [Expedite the transfer of irradiated nuclear fuel from densely-packed "wet" storage pools into Hardened On-Site Storage \(HOSS\) dry casks.](#)
3. Store irradiated nuclear fuel in HOSS dry casks, **as safely and securely as possible, as close to the point of generation as possible, in a monitored, inspectable, retrievable manner.**
4. Given the unavoidable risks of high-level radioactive waste truck, train, and/or barge shipments on roads, rails, and/or waterways ([Mobile Chernobyls, Dirty Bombs on Wheels, Floating Fukushimas](#)), **transport irradiated nuclear fuel only once**, such as straight to a (suitable, acceptable, just) geological repository, **not to so-called centralized interim storage (de facto permanent parking lot dumps, such as those currently targeted at Waste Control Specialists, LLC in Andrews County, west Texas; at Eddy-Lea Counties, near the Waste Isolation Pilot Plant in southeast New Mexico; Native American reservations; nuclear power plants, etc.).**
5. **Geological repositories** must be **scientifically suitable** (capable of isolating the hazardous high-level radioactive waste from the living environment forevermore), **socially acceptable** (genuinely consent-based), and **environmentally just**. Note that no such suitable/acceptable/just geologic repository has yet been found, in more than half a century of looking. DOE has admitted it can't open *any* repository (even an unsuitable/unacceptable/unjust one) till 2048 at the earliest. That will be over a century after [Enrico Fermi, in 1942, generated the first high-level radioactive waste](#), in the world's first reactor, as part of the Manhattan Project to build atomic bombs; and more than 90 years years after the first "civilian" atomic reactor began generating waste at Shippingport, PA.
6. **Do not reprocess (extract fissile plutonium and/or uranium from) irradiated nuclear fuel.** Not only would this risk **nuclear weapons proliferation**, and be **astronomically expensive**; it would also very likely cause **environmental ruin downwind and downstream** of wherever it is carried out, as has been shown at such places as Hanford Nuclear Reservation in Washington; Savannah River Site, South Carolina; West Valley, New York; Sellafield, U.K.; [La Hague, France](#); Kyshtym, Russia; etc.
7. **Preserve and maintain "wet" storage pools – albeit emptied of irradiated nuclear fuel -- as an emergency back up location for cask-to-cask HOSS transfers**, when old HOSS casks deteriorate toward failure, and need to be replaced with brand new HOSS casks. That is, do not dismantle pools as part of nuclear power plant decommissioning, post-reactor shutdown.
8. **Carefully pass information** about storing irradiated nuclear fuel as safely as possible, as close to the point of generation as possible, **from one generation to the next, à la the concept of "Rolling Stewardship"** described by the Canadian Coalition for Nuclear Responsibility.
9. **Address the shortfall in funding for forevermore storage of high-level radioactive waste.** [Dr. Mark Cooper of Vermont Law School has estimated](#) the first 200 years of commercial irradiated nuclear fuel storage (assuming just a single repository, although *at least two* will be required!) will cost \$210 to \$350 billion, even though there is only some tens of billions of dollars remaining in the [now-terminated Nuclear Waste Fund](#), with additional fees no longer collected from nuclear power ratepayers. (This means federal taxpayers will be forced to make up for the shortfall!)
10. **Environmental justice**, in keeping with [President Bill Clinton's 1994 Executive Order 12898](#), demands that [Native American communities and lands, as well as those of other low income and/or people of color communities, never again be targeted for high-level radioactive waste parking lot dumps or permanent burial sites, a shameful form of radioactive racism dating back decades in the U.S.](#)

For more info., go to: <http://www.beyondnuclear.org/radioactive-waste/>