

## WCRM-GEIS2CEm Resource

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**From:** Stephen Shuput [sshuput@hotmail.com]  
**Sent:** Monday, October 07, 2013 8:28 AM  
**To:** RulemakingComments Resource

Dear NRC,  
RE: Docket ID No. NRC-2012-0246

The best solution to radioactive pollution is to stop making it. It is dirty at every step. The mining gives cancer to the miners, and the tailings give cancer to families living nearby. The waste products result in nearly permanent pollution the storage of which is problematic. Nuclear energy is more expensive than any other energy when you take subsidies into account.

For the HLRWs that already exist, require Hardened On-Site Storage (HOSS). Hundreds of environmental and public interest groups, representing all 50 states, have endorsed the Statement of Principles for Safeguarding Nuclear Waste at Reactors, which describes HOSS.

NRC's assumption that "indefinite storage" at reactor sites can go on literally forever, without a loss of institutional control, is ridiculous. It is a recipe for Fukushima-like disasters.

NRC has not dealt with the very real risk that the irradiated nuclear fuel will so degrade with age that transfer operations cannot be carried out safely or smoothly. This is especially a risk with "high burn-up fuel," that has spent more time in an operating reactor core, and is thus significantly more radioactive and thermally hot. NRC has also not provided the price tag for such future transfer and replacement operations.

NRC downplays the risks of pool fires by assuming that surrounding populations will be successfully evacuated. But nuclear utilities are allowed to store HLRW in pools for many decades after reactors permanently shutdown, in order to defer the costs of dry cask storage as far off into the future as possible, despite the inherent risks. At the same time, NRC allows utilities, via exemptions from regulations, to do away with 10-mile radius emergency planning zones (EPZs) within as soon as 12 to 18 months post-reactor shutdown. This, despite the lingering risk of storing HLRW in pools at such shutdown reactor sites. How can populations be evacuated, if EPZs have been dismantled?!

NRC also downplays the risks of pool fires by assuming that a pool drain down accident (or attack) involves the complete drain down of the pool. However, as environmental coalition expert witness Dr. Gordon Thompson of the Institute for Resource and Security Studies (IRSS) has pointed out, any technically competent person paying attention to the issue should have known since 1979 that a *partial* drain down of the pool is actually a worse-case scenario, for the leftover water in the bottom of the pool would block convection current air flow which would help cool the irradiated nuclear fuel, leading to faster heat up to the ignition point.

Sincerely,  
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