Kay Drey

December 20, 2013

To: Rulemaking.Comments@nrc.gov

Docket ID No. NRC-2012-0246

re: the U.S. Nuclear Regulatory Commission's radioactive ***Waste Confidence Generic Environmental Impact Statement.*** NUREG-2157.

It was my intention to read carefully the U.S. Nuclear Regulatory Commission's entire *Waste Confidence Generic EIS* (Draft Report for Comment) before submitting comments by today's December 20 deadline. I am disappointed I have not had sufficient time to complete my study of this document.

Instead I have had to study, participate in public meetings, write, and worry about just one radioactive waste site --- here in St. Louis --- namely, the West Lake Landfill. West Lake contains what many people recognize as some of the oldest radioactive waste of the Atomic Age. The landfill is located in the floodplain of the flood-prone Missouri River, just upstream from the Missouri/Mississippi rivers' confluence --- and upstream from the drinking water intakes for many St. Louisans and others farther downstream.

And most recently, to the surprise and concern of the St. Louis public, we have learned that the West Lake Landfill contains not only historically significant and highly radioactive nuclear weapons wastes, but it is also the site of an advancing "underground smoldering event" --- that is, **a fire.**

Starting in April 1942, engineers, scientists, and other workers at the Mallinckrodt Chemical Works (MCW), a mile from Downtown St. Louis, began to generate tons of extremely radiotoxic, long-lived uranium and thorium wastes for the Manhattan Project. MCW processed uranium and generated radioactive waste at the Downtown plant for fifteen years, and then for another ten years at the Weldon Spring plant, across the Missouri River, in St. Charles County.

Amazingly enough, it had taken MCW only fifty days in 1942 to figure out how to purify the requisite tonnage of highly pyrophoric uranium that was then used for the world's first self-sustaining nuclear chain reaction. On December 2, 1942, in the Fermi reactor, under the University of Chicago's football field --- using Belgian Congo uranium purified here in St. Louis --- the Atomic Age was born.

And yet, to date --- seventy-one years later --- no site or technology has been discovered that can be guaranteed to be permanent enough to isolate even the first cupful of those long-lived radioactive wastes.

As far as anyone has determined, the brilliant minds that carried us into the Atomic Age were never asked if they could get us out.

So, now what ?!

I hope the Nuclear Regulatory Commission will address the following questions**:** → →

1. Will the NRC require its nuclear power plant licensees to implement hardened on-site storage for their irradiated nuclear fuel --- that is, require that the irradiated fuel be removed from vulnerable, high-density reactor waste pools for storage in hardened dry-storage casks fortified against attacks and natural disasters?

2. Will the NRC compare the risks and costs of isolating irradiated nuclear fuel for centuries with the costs of generating renewable energy (like solar and wind) and of increasing energy efficiency?

Sincerely,

Kay Drey

Member of the Beyond Nuclear
Board of Directors