

Last Thoughts

Dear Readers:

As many of you already know, after 15 years at the helm of *Radwaste Solutions*, I am retiring. By the time you read this, I will have already shaken off the shackles of magazine editorship, while I still have some semblance of health and energy left. It's time for someone younger and hungrier (and perhaps less cynical) to take on the task.

A time like this generally calls for an assessment of where we are in this industry and where we are likely to be in 10 or 20 years' time. Alas, I don't like where we are in this industry right now. Yes, we've made great progress in some areas over the past 15 years. For example, that huge K-25 building at Oak Ridge is, for the most part, deactivated and dismantled. (See "K-25 Challenges Met," this issue, page 16). The Savannah River Site has decommissioned some of the old production reactors, and the Hanford site has cocooned most of its old production reactors, as well as cleaned up a lot of old waste dumps. Rocky Flats is a wildlife refuge. Fernald has built wetlands—school children take nature walks there. Several commercial reactors have nothing left onsite but their spent fuel, safely tucked away in dry storage. So, we can be proud of our decontamination and decommissioning progress. And I must certainly mention the fact that the Waste Isolation Pilot Plant opened in March 1999, and has been operating safely and successfully ever since. We can be proud of that as well.

However, in the area of national policy, the United States is in a shaky situation. Remember 1980, and the passage of the Low-Level Radioactive Waste Policy Act? States were going to take care of the LLW generated within their own borders, or join with other states to create compacts to deal with the waste. How well has

that worked? Well, for a couple of states or compacts, it has worked very well indeed, because they have been able to limit the amount of waste coming into the state or compact, which is what spurred the passage of the act in the first place. For the rest of the country, however, not much success has been demonstrated. What prevented the construction of a host of low-level waste facilities in various states or compacts? Mostly politics—politics and fear. Years ago, Nebraska paid out more than \$100 million rather than build a low-level waste facility within the state. I can only assume that because Nebraska is an agricultural state, people feared that their agricultural products would be poisoned by the waste coming into such a facility. Or feared that *others* would fear that their agricultural products would be poisoned—a case of our fearing fear itself.

Since the passage of the low-level waste act, one facility opened outside the compact system: the EnergySolutions disposal facility in Utah; this facility, however, takes only Class A LLW. It took more than 30 years for the first LLW disposal site built under the compact system to open for business—the Andrews County, Texas, facility, operated by Waste Control Specialists, which opened last year. Because the facility is also authorized to take some out-of-compact waste, waste generators in all states now have a place to send the more radioactive of their low-level wastes. Between July 1, 2008, and April of last year, that waste had to be stored, with no sure destination in sight. So we've passed out of crisis mode and back into the cautionary mode—cautionary because no one knows how long this situation will last. Even though Texas is pretty much actively soliciting out-of-compact waste today, tomorrow things could change.



A Farewell Note To My Readers

So that's low-level waste. What about high-level waste and spent (or used) nuclear fuel?

Remember the Nuclear Waste Policy Act of 1982? This well-crafted bill called for a first repository in the western United States (in tuff, basalt, or salt—western-type rocks) and a second repository in the eastern United States in granite. It didn't take long, however, for politics to scuttle this delicate balance, and suddenly the (only) repository was sited in Nevada. Readers of Mark Twain's *Tom Sawyer* know that if you *tell* someone to do something, it's a chore

to be protested. But if you make doing something a privilege, people will stand in line to do it. It worked with fence white-washing, and it might have worked with hosting a repository. But Nevada never got the chance to want it; instead, the repository was forced upon them, and then we wondered why they protested. It was just a matter of time before someone in Nevada became powerful enough to reverse the decision. Harry Reid endorsed Barack Obama for president, and Obama returned the favor. *Quid Pro. And Quo.* Twenty-five-plus years of work on the Yucca Mountain Project and all that remains is a mile-high stack of documents somewhere in the government archives—and a mountain with a tunnel in it on government property in Nevada.

Today, now that we have started all over, we have a U.S. Department of Energy “strategy” that calls for a pilot used fuel storage facility to be opened by 2021 and a larger, but similar, facility opened by 2025. As for a repository? Maybe by 2048.

My older grandson is 12 years old. With any luck, in 10 years he will be graduating from college. Will a pilot used fuel storage facility be operating by then? My younger grandson is 10 years old. If he graduates from college in 2025 (12 years from now), will there be a large used fuel storage facility just opening? Don't bet the college fund on it. Building anything calls for new legislation, and Congress doesn't seem to be in the mood for new legislation these days. It's possible that New Mexico *wants* to host a used fuel storage facility. If they need congressional approval, however, Congress is just as likely to pass a law stating that you can store used fuel in any state *but* New Mexico. My grandsons will be well into their 40s in 2048, for the supposed repository opening, and many of us will be long gone.

Internationally, things are progressing more surely and smoothly. Both Sweden, which had its own siting problems early on, and Finland seem to be well along on their repository programs, although Finland may encounter some problems over who has access to the repository, with a new utility planning some nuclear power plants wanting to be able to dispose of its used fuel in the Posiva facility, and Posiva, owned by the country's two current nuclear utilities, not being very amenable to the suggestion.

This year, France is holding the public debate on Cigéo, its own deep geological repository. At this year's International High-Level Radioactive Waste Conference, held in Albuquerque at the end of April, Gerald Ouzounian light-heartedly accused the U.S. of “ignoring” France. (At least I hope it was light-hearted.) He's probably right, and in partial reparation for that oversight, in this issue we present his conference paper as an article (see “Introducing Cigéo, the French Geological Repository Project,” this issue, page 46).

The United Kingdom had a setback earlier this year in its efforts to find a site for a high-level waste repository, with the Cumbria County Council bowing out of the voluntary siting process, leaving two boroughs in the county, which were still willing to go forward, with no way to proceed. Canada, however, seems to be making good progress toward finding a volunteer site for its own repository. China hopes to have an underground research laboratory open at or near the site for its repository in the 2020s. Switzerland is going forward with its program, despite having rejected the consent-based siting schemes that other countries have recently adopted. Germany is basically starting all over, just like the

United States, and many of the smaller nuclear countries are hoping for an international repository scheme to move forward.

So that is the situation that my successor faces as he or she takes over the editorship of the magazine. I wish the new editor much luck and success.

I would be remiss if I did not mention here that my long-time cohort on the magazine, copy editor Rhonda Carpenter, is also stepping down at the conclusion of this issue. Those of you who wrote for the magazine know that Rhonda was the one who whipped the articles into shape before publication. She has been a dream copy editor, someone I could always count on to seek out the grammar errors and typos that I generally miss. We may have disagreed over comma usage on occasion, but on everything else we found plenty of common ground.

At ANS headquarters, the current desktop editor, Chris Salvato, will remain on the magazine staff, as will the Advertising team: Jeff Mosses, Erica McGowan, and Lisa Dagley. Betsy Tompkins remains the magazine's publisher. They will continue to work with a new editor to bring you the best *Radwaste Solutions* magazine that it's possible to produce.

And on that note, I must say farewell. There are books waiting to be read, bridge hands waiting to be played, trips waiting to be taken, and naps waiting to be, well, napped. I am looking forward to all of them.

Regards,

Nancy Zacha, Editor

P.S. Please remember to floss daily and always wear sunscreen. You'll be glad you did when it's your turn to retire.