How Texas Saved the Day: the Texas Compact for Radioactive Wastes

People tend to be afraid of anything radioactive, and the management of radioactive wastes quickly evokes NIMBY (not in my backyard). Radioactive wastes, however, are a necessary byproduct of using nuclear energy as a green energy for the electric utilities. In terms of volume, most radioactive wastes are called low-level radioactive wastes (LLRW). LLRW is a broad category of solids, liquids and gases that can contain several different radionuclides that are byproducts from several sources. Nuclear power plants generate the majority of LLRW in the U.S. (Contreras, 1992). The prevalent method for disposing LLRW has been shallow-land burial (Roy, 2013). Our previous attempts to manage low-level wastes were indeed problematic. Disposing of LLRW generated in Illinois contributed to the ill-fated Maxey Flats Disposal Site in Kentucky, the now closed Sheffield Low-Level Radioactive Waste Disposal Facility, and the Martinsville Low-Level Waste Disposal Facility which was proposed but never established. For years, Illinois had only three options for disposing of LLRW in one of three other states, and each facility could not accept certain types (Class B and C) LLRW generated in Illinois. For example, the Clinton Power Station would simply store Class B LLRW on site until an alternative arrived. And they waited and waited.

In 2011, history was made! The Texas Compact Disposal Facility opened (http://www.wcstexas.com/facilities/compact-waste-facility). Located in Andrews County, northwest Texas, this new facility is the first one established since passage of the Low-Level Radioactive Waste Policy Act in 1980. The new facility is operated by Waste Control Specialists and is located in an arid climate. The facility has been licensed to accept Class A, B, and C LLRW by the Texas Commission on Environmental Quality. The Texas House of Representatives voted to allow Waste Control Specialists to accept LLRW from 36 other U.S. States which included Illinois. Texas saved the day. But why Texas? What made Texas so unique? The proposed facility had local support and the support of the State government. The opening of the facility was celebrated by a ribbon-cutting ceremony and great enthusiasm. It is open for business today. With this remarkable achievement in mind, it is frustrating—even embarrassing—to see how the Federal Government of the U.S. has failed to resolve the issue of managing spent nuclear fuel! Perhaps it's time to realize that our dysfunctional government will *never* solve the problem. The Nuclear Energy Institute proposed that the private sector should take the lead role in citing and constructing a geological repository in the U.S. I agree. Perhaps we should talk to Texas.

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Contreras, J. 1992. In the village square: risk misperception and decision making in the regulation of low-level radioactive waste. *Ecology Law Quarterly*, 19, 481-545.

Roy, W. R. 2013. Radioactive waste management: What does the public need to know? *Journal* of Nuclear Energy Science and Power Generation Technology (http://dx.doi.org/10.4172/2325-9809.S1-005).