WHAT COULD GO WRONG?

WCS and AFCI companies seek to bring HIGH-LEVEL RADIOACTIVE WASTE from the nation's nuclear reactors to TEXAS; ELEA seeks a site in New Mexico

High-level radioactive waste is the most dangerous of all radioactive materials. Contamination resulting from the Fukushima meltdown disaster came from this same source - irradiated fuel from nuclear reactors.

High-level radioactive waste includes irradiated (used) fuel rods from nuclear reactors that contain uranium and plutonium. Radiation exposure can cause genetic damage, leading to birth defects, and cause many kinds of cancers, radiation sickness and even death. An unshielded person a few feet away from spent fuel rods would be immediately incapacitated and die within a week according to the Texas Commission on Environmental Quality.

Nevada fought against burial of high-level radioactive waste at the Yucca Mountain site for decades, and other states have fought as well. Deaf Smith County in the Texas Panhandle was considered as a permanent repository site before Yucca Mountain was chosen, but ranchers and farmers fought hard due to concerns about radioactive water contamination. Several counties have said no to high-level radioactive waste proposals recently. Despite industry claims, many people DO NOT CONSENT to having the nation's radioactive waste in their backyards.

What Should Be Done With High-Level Radioactive Waste?

Centralized (Consolidated) Storage is NOT needed. The least risky option is to store fuel removed from nuclear reactor fuel pools in dry casks, secured at the generation site or nearby. Most reactor sites are now licensed to store waste for 60 years past decommissioning, and these sites will remain guarded for decades anyway.

Shipping radioactive waste by rail or trucks increases risks of terrorism and accidents, and the process would continue for over 20 years. Yucca Mountain efforts have failed and no permanent repository is available yet, so why ship this dangerous waste just to store it in a different location? The NRC should prevent terrorism and accident risks by halting consideration of consolidated radioactive waste storage.

For more information visit **www.NoNuclearWasteAqui.org** or **www.RanchersCoalition.org**

No Nuclear Waste Aqui Contacts:

- Karen Hadden, SEED Coalition, 512-797-8481 karendhadden@gmail.com
- Tom "Smitty" Smith, Public Citizen - Texas, 512-477-1155, smitty@citizen.org
- Former State Rep. Lon Burnam, Ft. Worth, 817-721-5846, lonburnam@gmail.com
- Diane D'Arrigo, Nuclear Information and Resource Services - NIRS, 202-362-6827. dianed@nirs.org, www.nirs.org

Nuclear expert: Dr. Arjun Makhijani, Institute for Energy & Environmental Research - IEER, www.ieer.org

KEY FACTS:

- Andrews and Culberson Counties in West Texas have been proposed as sites for the centralized storage of dangerous high-level radioactive waste from nuclear reactors around the country, by Waste Control Specialists (WCS) and Advanced Fuel Cycle Initiative (AFCI), and could later be considered for permanent disposal as well.

- Transporting high-level radioactive waste across the country and in Texas imperils our health and lives with risks of accidents, radiation releases, leaks or terrorist actions.

- High-level radioactive waste is so dangerous that it must remain isolated from living things for thousands of years. It is mainly irradiated (spent) fuel rods from nuclear reactors, which still contain most of their original uranium, as well as with radioactive strontium, cesium and plutonium, which are created during the reactor fission process. Some of these materials have long half-lives, and remain dangerous far into the future. For example, plutonium remains dangerous for over a quarter of a million years. Inhaling it is likely to lead to cancer.

- About 100,000 metric tons of irradiated fuel will have been generated by existing U.S. reactors by the time they cease operating, with roughly 1000 metric tons of plutonium. If separated, there would be enough plutonium for 120,000 nuclear bombs. If diluted uniformly, the strontium-90 in would be enough the contaminate the entire fresh water supply of the world to about 60 times the U.S. drinking water standard.[1]

- TCEQ acknowledges the vulnerability of radioactive waste to sabotage during transport, and that "consequences due to sabotage or accidents are also higher during transport since the waste may be near population centers."[2] Centralized (consolidated) Interim Storage of the nation's high-level waste at a single location would increase risks by creating an additional site that must be secured.[3]

- A DOE reporte cited by TCEQ calculated that the 53,000 truck shipments originally anticipated to go to Yucca Mountain if transport was mainly by truck would likely have resulted in 53 accidents. Train accidents were anticipated at a rate of 1 in 10,000 shipments. At least one train accident was expected to occur if transport was mainly by train.

- A DOE report found that a severe accident involving one radioactive waste cask that released only a small amount of waste would contaminate a 42-square mile area, with cleanup costs exceeding $620 million in a rural area. Clean up in an urban area would be more time consuming and it could cost up to $9.5 billion to raze and rebuild the most heavily contaminated square mile.[4]

- Importing high-level radioactive waste might benefit a few corporations, but millions of Texans and people along transport routes throughout the country would bear the financial and health risks of accidents or sabotage.

---

[1] Managing Spent Fuel and High-Level Waste: Strategic Considerations, Oct. 4, 2014, Presentation at Earth, Wind and Fire Summit, Dallas, Texas. Dr. Arjun Makhijani, President of Institute for Energy and Environmental Research

[2] TCEQ's Assessment of Texas's High Level Radioactive Waste Storage Options, March 2014, Page 30. http://www.documentcloud.org/documents/1100389-tceq-assessment-of-texas-high-level-radioactive.html

[3] Managing Spent Fuel and High-Level Waste: Strategic Considerations, Oct. 4, 2014, Presentation at Earth, Wind and Fire Summit, Dallas, Texas. Dr. Arjun Makhijani, President of Institute for Energy and Environmental Research

[4] Fact sheet. Transportation of Spent Nuclear Fuel and High-Level Radioactive Waste to a Repository, Section 4. http://www.state.nv.us/nucwaste/yucca/trfact01.htm