

WHAT COULD GO WRONG?



Citizens oppose importing and dumping HIGH-LEVEL RADIOACTIVE WASTE in TEXAS!

The most dangerous of all radioactive waste is known as “high-level” radioactive waste. It’s the big ongoing risk with the Fukushima disaster.

High-level radioactive waste consists mainly of the irradiated or “spent” fuel rods from nuclear power and weapons reactors. They contain dozens of radioactive elements including strontium, cesium and plutonium, which can be deadly if inhaled or exposed unshielded. After being in a nuclear reactor, the fuel rods are millions of times more radioactive.

The fuel rods are then “cooled” in an irradiated or “spent” fuel pool, but they remain highly radioactive. Some of the radionuclides remain dangerously radioactive for a quarter to half a million years, and their radioactive decay products may remain radioactive even longer.

An unshielded person standing 3 feet away from these fuel rods would be immediately incapacitated and die within a week – according to the Texas Commission on Environmental Quality. Radiation exposure can damage a person’s DNA, leading to birth defects. It can cause many kinds of cancers, radiation sickness and death. Inhalation of plutonium is extremely risky since it stays in the body for a long time and leads to cancer. There is no safe level of exposure.

Many states have fought having a high-level radioactive dump. Nevada fought burial of high-level radioactive waste at the Yucca Mountain site for decades, and funding was halted in 2010.

Importing high-level radioactive waste, whether for storage or disposal would create serious transportation and security risks. It risks contaminating our land, water, roads and rails. Wealthy corporate profiteers would benefit, while Texans would bear financial risks.

How did we get to this point? The Nuclear Waste Policy Act, 1982, made the Department of Energy (DOE) responsible for finding, building and operating two underground disposal facilities, called geologic repositories. Deaf Smith County, Texas was considered as a site, but farmers in Texas fought hard. The Yucca Mountain site, 100 miles from Las Vegas, despite high earthquake, volcanic and water risks, was pursued, but after \$12 billion was spent on research, DOE closed this site in 2009. Some states and utilities still want Yucca Mountain to open and multiple lawsuits are trying to halt DOE’s attempted license withdrawal. Opposition has halted many past efforts to site a geologic repository. In 2012, Obama’s Blue Ribbon Commission called for states or communities to volunteer to take high-level radioactive waste.

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Loving County, TX – outlined in red
Waste Control Specialists (WCS) ★
South Texas Project Nuclear Reactors ♦ Bay City, TX
Comanche Peak Nuclear Reactors ○ Glen Rose, TX

Pantex Plant - ■ - nuclear weapons assembly & disassembly, Amarillo
Urenco USA/ LES ✱ uranium enrichment, Lea County, Eunice, NM
WIPP site ✚ 26 miles SE of Carlsbad, NM

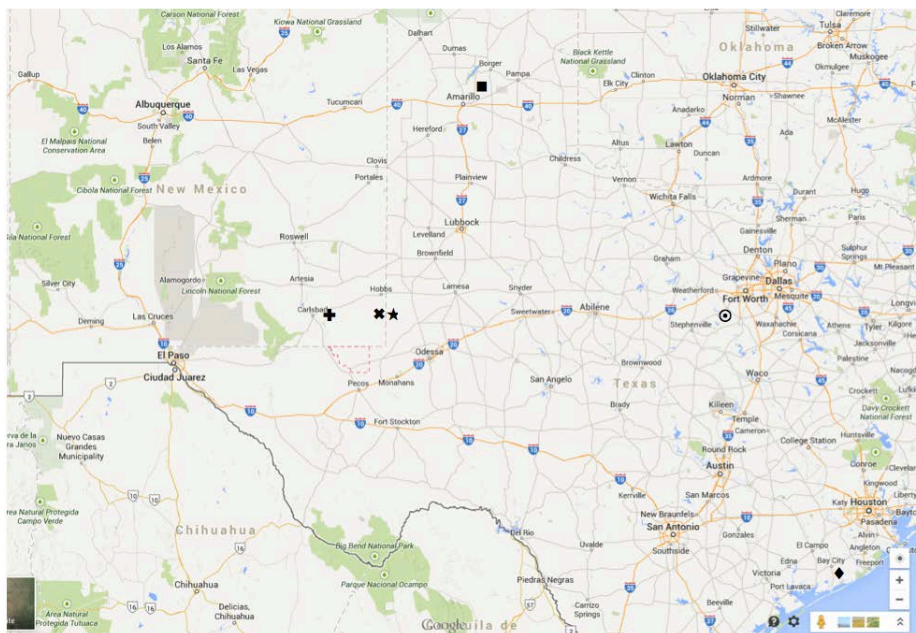
Suggested sites for High-Level Radioactive Waste storage or disposal include:

Andrews County, TX
- where WCS has a “low-level” radioactive waste dump

Loving County, TX

Lea County, New Mexico

Eddy County, New Mexico
- Waste Isolation Pilot Project location– disposal of radioactive waste from weapons production.



Highlights from the TX Commission on Environmental Quality TCEQ's Assessment of Texas's High Level Radioactive Waste Storage Options, March 2014

(<http://www.documentcloud.org/documents/1100389-tceq-assessment-of-texas-high-level-radioactive.html>)

Terrorist risks of transporting high-level radioactive waste through major metropolitan areas are significant. Millions of people could be held hostage or be put at risk from a terrorist incident. TCEQ's report says spent nuclear fuel is more vulnerable to sabotage or accidents compared to storage since fewer security personnel are available and fewer engineered barriers would be available.

Accidents happen. Shipments to a repository site from reactors around the country would likely occur for over 24 years. The DOE calculates that

*if shipments were mainly by rail, there would be about 10,700 shipments; and if mainly by truck, there would be 53,000 shipments and

***dozens of accidents would be expected.** If the number of shipments were doubled, by sending waste to storage and later to a permanent repository, the number of predicted accidents would increase as well.

DOE minimizes concern about the risks of releases from accidents, cancer risks to the public or the loss of use of contaminated land, waterways and buildings, but it only takes one accident to lead to unprecedented disaster. Unanticipated releases and scenarios could occur. Sometimes the “impossible” happens.

The necessary solid scientific analysis for any permanent repository would take about ten years. This science, not political decisions, should come first.

No consolidated interim storage site for high-level radioactive waste is needed, and creating one would only increase security risks by adding an additional site plus transport routes.

TCEQ acknowledges that if a storage site is created, Texas could become the de-facto permanent disposal location. Crucial thorough scientific analysis may not occur, or may be minimized.