

## Texas: Path to Low-Level Radioactive Waste Disposal

Susan M. Jablonski, PE  
Director  
Radioactive Materials Division  
Texas Commission on Environmental Quality



---

---

---

---

---

---

---

---

## Radiation Material Regulation

- There are three Texas state agencies involved in the regulation of radioactive material and waste associated with possession activities
- The Texas Legislature has addressed the consolidation of radioactive material regulation at the state level for activities ceded by the federal government



---

---

---

---

---

---

---

---

## Moving to Privatizing Disposal

- Changes resulting from 2003 Texas Legislation
  - Leadership working with stakeholders to reach compromise to develop policy
  - House Bill 1567 – revised state's policy
    - Allowed for privatization, for-profit disposal operation
    - Acceptance criteria for some specific wastes
    - Continued regulation of waste disposal fees
    - Ability to condemn private mineral rights
    - Allowed for federal facility waste at separate facility
    - Disposal facility could accept federal mixed LLW
    - Siting criteria restrictions



---

---

---

---

---

---

---

---

## Addressing Public Policy Issues

- Texas policies on radioactive waste management and disposal
  - Informed by the past attempts to site and license
  - Remarkable policymaker commitment and local public support
  - Technical approach, expertise and technology are not the sole solution
  - Focused innovation and risk-informed
  - Openness and transparency
  - Holistic regulation, including public health surveillance




---

---

---

---

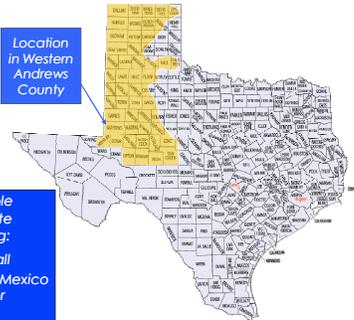
---

---

---

---

## Statutory Siting Criteria



Shaded Possible Counties for Site Identified Using:

- 20-inch Rainfall
- 62 miles from Mexico
- Selected River Segments




---

---

---

---

---

---

---

---

## Two Facilities – One License



- Compact Waste Disposal Facility - 29.66 acres
  - Land and facility owned by State of Texas
  - Authorized Texas Compact LLW acceptance
    - Texas Compact waste – 2.3 million feet<sup>3</sup> in volume and 3.9 million curie in radioactivity
    - All waste to be over-packed in steel reinforced concrete canisters with the void spaces filled with grout
- Federal Waste Disposal Facility - 89.90 acres
  - If waste disposed, facility to be owned by DOE
  - Authorized federal facility LLW and mixed waste
    - Two disposal units planned
    - Volume limitation of 300,000 yards<sup>3</sup> or 8.1 million feet<sup>3</sup> containerized waste
    - Total proposed volume of 26 million feet<sup>3</sup> and total radioactivity of 5.6 million curies

---

---

---

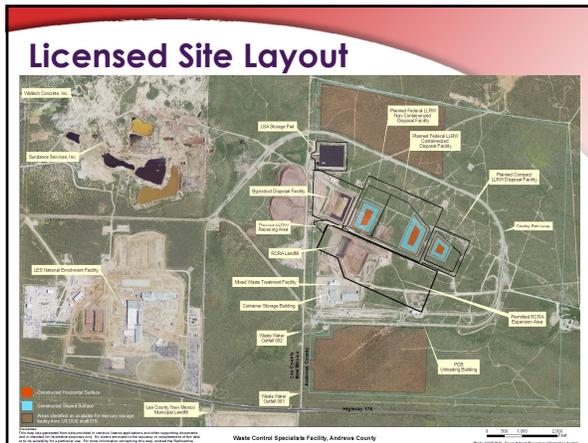
---

---

---

---

---




---

---

---

---

---

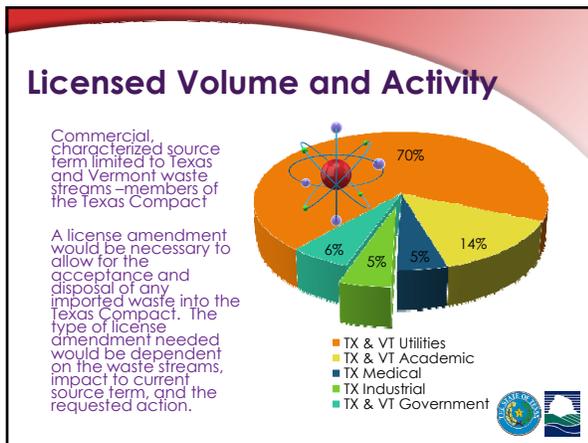
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

- ### Moving into Construction
- January 6, 2011 Amended License: facility design, construction, and monitoring program changes prior to start of construction
  - Land and mineral transfer completed and lease back agreement from State to operator in place
  - TCEQ written authorization to commence construction issued on January 7, 2011 and construction began January 10, 2011
  - License condition requirements triggered during construction and prior to approval to accept waste for disposal and begin operations
- 

---

---

---

---

---

---

---

---

---

---



---

---

---

---

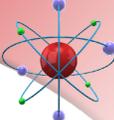
---

---

---

---

### Before Disposing of Waste



- New performance assessment using models/codes capable of addressing site's complexities with updated characterization parameters
- Approved financial assurance in place, as-built construction inspection, and operating procedures reviewed
- For federal waste, Secretary of Energy agreement to accept all right, title and interest in the federal waste disposal facility



11

---

---

---

---

---

---

---

---