



**Federal  
Low-Level  
Radioactive  
Waste  
Policy Act**

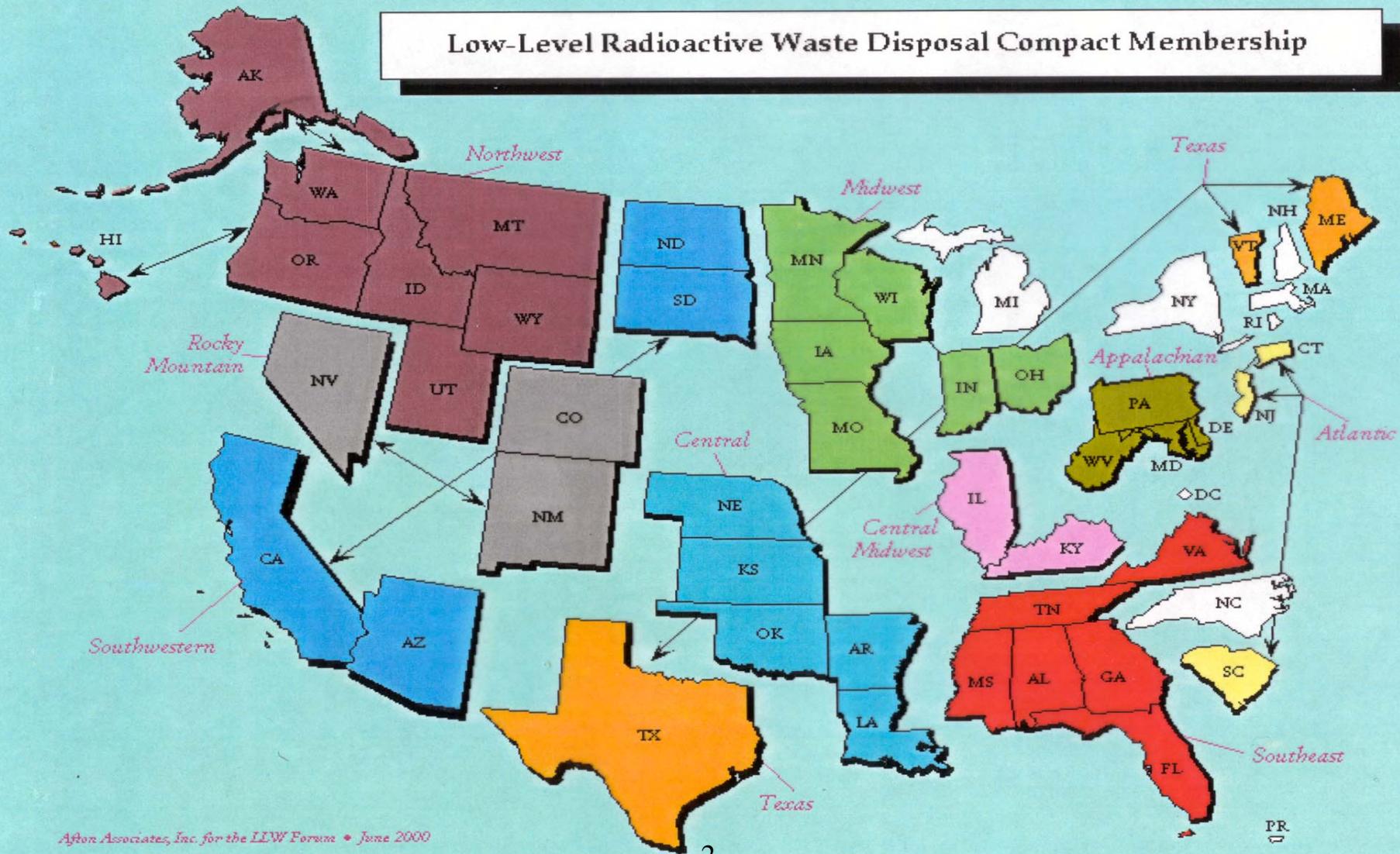
- **States Responsible**
- **Compacts Encouraged**
- **Exclusion of Out-of-Compact Waste**



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



## Low-Level Radioactive Waste Disposal Compact Membership





## **Status of Commercial LLRW Disposal Facilities and New Developments**

- **Barnwell Disposal Facility in South Carolina (Regional Facility)**
  - **Accepts Class A, B and C wastes**
  - **Closed to generators outside the Atlantic Compact (CT, NJ, SC) as of July 1, 2008**
- **Richland Facility in Washington (Regional Facility)**
  - **Accepts Class A, B and C wastes from the Northwest and Rocky Mountain Compacts**
  - **Accepts radium sources for disposal from other compacts**
- **Energy Solutions Facility in Utah (not a Regional Facility)**
  - **Accepts Class A waste from the entire nation except the Northwest and Rocky Mountain Compacts**
  - **In April 2012, received a variance from Utah for disposal of Class A sealed sources**
  - **Sources sealed limited to half-life of Cs-137 or less and limited to one year from the receipt of first shipment**



## **WCS Disposal Facility in Texas (Regional Facility for Texas Compact)**

- **Two facilities: one license**
  - **Compact facility (29.66 acres, 2.3 M ft<sup>3</sup> and 3.9 M Ci)**
  - **Federal facility (89.90 acres, 26 M ft<sup>3</sup> and 5.6 M Ci)**
- **Facility is fully operational**
- **Accepts commercial LLRW (Class A, B and C) and federal LLRW and mixed waste**
- **Able to accept large components as non-containerized waste**
- **Transportation authorized by highway or rail**
- **Disposal of imported waste is limited to 50,000 ft<sup>3</sup> and 120,000 Ci annually**
- **Increase in curie limit for imported waste and C-14, decayed source term and acceptance of unlimited DU being considered**
- **Waste of international origin is prohibited from being accepted for disposal**



1. Access road to 1,338-acre fenced site (guard house entrance)
2. On-site rail spur and rail-unloading facility
3. Maintenance building
4. Administration buildings with analytical and radiological laboratories
5. Container Storage Building (CSB)
6. Stabilization Building (SB) (West portion) and Mixed Waste Treatment Facility (MWTF) (East portion)
7. Bulk/Bin Storage Units (BSUs)1-3 (bin storage area [BSA-1] is covered)
8. RCRA Subtitle C landfill will expand to the East, with closed cells to the West
9. 11e (2) Byproduct material landfill
10. Federal Waste Disposal Facility (FWF) for LLW and LLMW will expand to the West
11. Compact Waste Disposal Facility (CWF) for LLW will expand to the East
12. Ten-acre storage area for low-specific-activity (LSA) waste
13. Low-level disposal operations administration building
14. Rail unloading building for emptying gondola cars



Bureau of Radiation Protection

## TCEQ Capacity Report

- **The report was published by TCEQ in November 2012**
- **The report contains the results of the study on available volume and activity of the compact waste disposal facility (CWDF) for disposal of compact and non-compact waste**
- **TCEQ conducted a survey to obtain projections of future capacity needs for the report**
- **CWDF was licensed in 2009 for 15 years until 2022 with the possibility of two additional 10-year renewal periods until 2044**
- **The study shows that the compact nuclear utilities generate in excess of 90% of LLRW by volume and 95% by radioactivity inventory**
- **The results indicate that CWDF could take significant curies of out-of-compact waste before impending on space that is required to be reserved for Texas Compact under the current license conditions**

**TCEQ – Texas Commission on Environmental Quality**

# Future Capacity Needs of the Texas Compact

	Million of Cubic Feet	Million of Curies
Licensed Volume	2.31	3.89
<b>Existing Facilities</b>		
2024 Operating	0.73	0.08
2044 Operating	1.15	0.14
Decommissioning	1.70	0.67
<b>Total (2044)</b>	2.85	0.81
<b>Possible New Facilities</b>		
2024 Operating	0.136	0.0627
2044 Operating	0.816	0.376
Decommissioning	1.557	0.550
<b>Total (2044)</b>	2.373	0.926
<b>Combined Total (2044)</b>	5.223	1.736

**Assumptions:**

- No waste processing or volume reduction (compaction, incineration, Steam reforming, etc.)
- No exportation of Class A waste
- No decay correction of disposed waste