



How Can the U.S. Achieve Success on the Road to a Repository? *Consent-Based Siting.*

To avoid the failures of Yucca Mountain, the government should establish baseline siting criteria that enable qualified communities to volunteer and seek informed consent from potential host communities.

How Congress Can Ensure Consent-Based Siting:

Require that general science-based standards for a repository are established before the search process begins.

Ensure that candidate host communities have access to the information and resources needed for effective and informed participation in pre-siting/licensing decisions.

Example of Success: During the Waste Isolation Pilot Plant (WIPP) siting process in New Mexico, establishment of the Environmental Evaluation Group helped gain the trust of state officials and the local community because it provided independent and credible technical information and review of the WIPP project.

Ensure that host communities give full and informed consent before a repository is sited.

Examples of Success: In 2024, Finland wrapped up construction on the world's first permanent nuclear waste repository, which is on track to begin operations in 2026.¹ Sweden is close behind, beginning construction on a permanent repository in January 2025. The siting process in both countries was consent-based.²

- *Sweden's waste management company, SKB, conducted feasibility studies and identified five potential sites. Of the five communities, SKB approached the three that already housed nuclear facilities. Two of these communities' municipal councils consented to further investigations, and one was ultimately selected.*
- *Finland's siting process had three steps: (1) a country-wide screening study; (2) preliminary site investigations; and (3) detailed site investigations and environmental impact assessments for four sites. Local support for a repository was strongest in the two communities that already hosted nuclear infrastructure. The more suitable site was chosen, and the government obtained approval from the municipal council.*

Ensure adequate funding for participation by community and environmental organizations in repository siting and licensing proceedings.

Ensure adequate state/tribal authority. Congress should amend the Atomic Energy Act to grant tribal and state governments authority to regulate radioactive materials beyond federal standards, with enforcement powers and resources, modeled after the Clean Air Act, Clean Water Act, and the Resource Conservation and Recovery Act.

Example of Success: Congress required EPA (not DOE) to certify that WIPP met waste disposal standards, including those under RCRA for mixed hazardous and radioactive waste. This gave New Mexico the authority to regulate mixed waste at WIPP, and the New Mexico Environment Department had to issue a Hazardous Waste Facility Permit for the repository. This assured state officials that the facility was safe.

Promptly resume Nuclear Waste Fund collections to fund repository construction and operation. The Fund should continue to support state, tribal, and local government participation in repository evaluations and licensing proceedings. The funding should be expanded to also support participation by citizens and environmental organizations.

¹ The World Nuclear Association, Country Profiles: Nuclear Power in Finland (Dec. 6, 2024), available at: <https://world-nuclear.org/information-library/country-profiles/countries-a-f/finland>.

² Report from the Blue Ribbon Commission on America's Nuclear Future (Jan. 2012), available at: https://www.energy.gov/sites/prod/files/2013/04/f0/brc_finalreport_jan2012.pdf.