

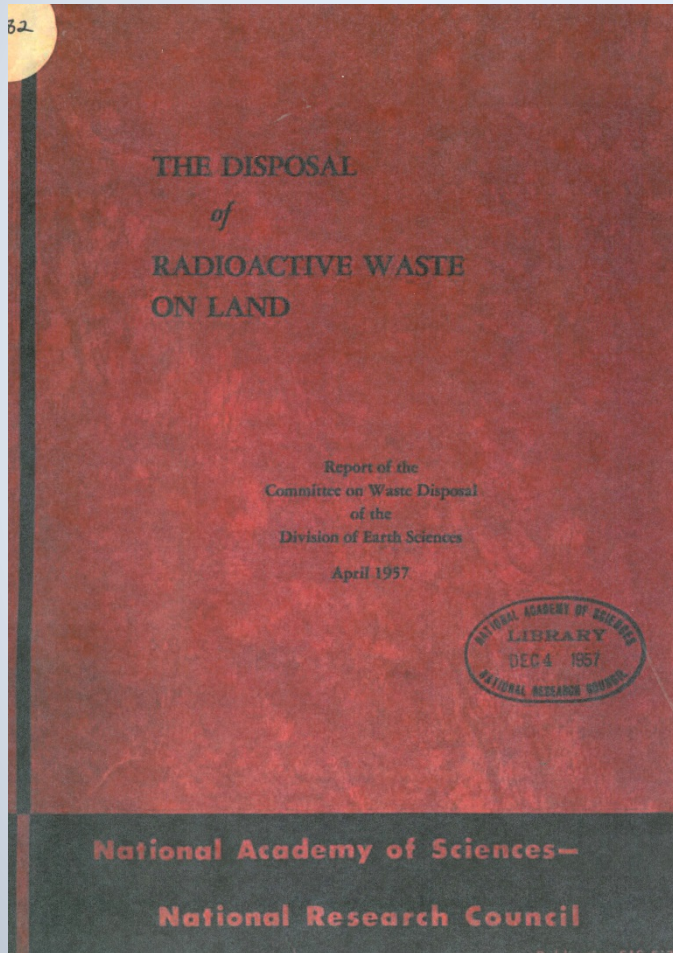
# The Future (and the Past) of Consent-Based Siting

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*The views expressed in this presentation are the author's. They do not represent the views of the U.S. Nuclear Waste Technical Review Board.*

# How You View a Problem Determines What You See



- Rejected “perpetual” storage in tanks of the liquid waste arising from the weapons complex
- Failed to appreciate what it would take to develop a repository
  - ✓ Fostered a sense of technological optimism
    - ➡ belief in a “technical fix”
  - ✓ Provided a rationale for postponing action



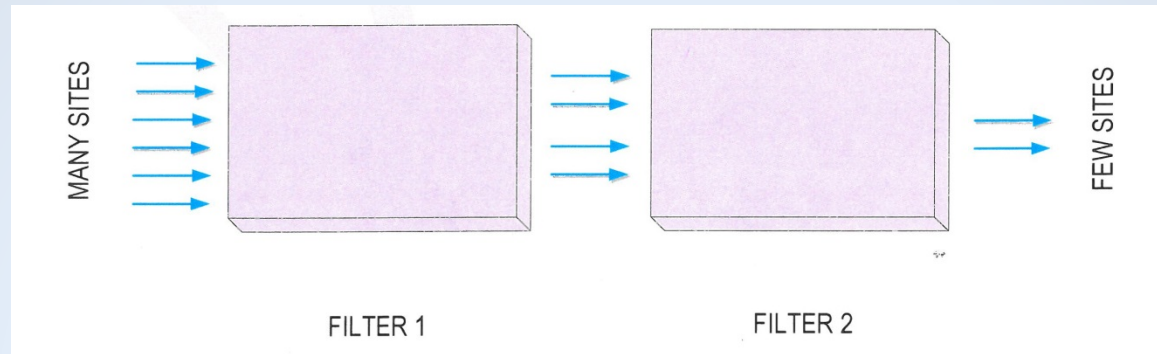
NAS 1957

# How Long Does It Take Just to Select a Repository Site?

COUNTRY	SITE- INVESTIGATIONS STARTED	SITE SELECTED	TIME TO SELECT SITE
CANADA	2002	No	13+ years
CHINA	1985	No	30+ years
FINLAND	1980	Yes	20 years
FRANCE	1987	Yes	19 years
GERMANY	1968	No	47+ years
JAPAN	2000	No	15+ years
SWEDEN	1980	Yes	29 years
SWITZERLAND	1978	No	37+ years
UNITED KINGDOM	1987	No	28+ years
UNITED STATES			
High-Activity waste	1965	Yes	37 years
Transuranic waste	1972	Yes	26 years

*Although extensive technical investigations contribute to the time needed, addressing a growing set of social issues has also proven to be quite demanding.*

# Prerequisites for Siting a Repository



Filters represent pre-established legal or regulatory determinations that a proposed site is both **technically suitable** and **socially acceptable**. In a staged process, sites might have to pass through the filters more than once.

*Because of the problems most national programs have encountered in attempting to site a repository, now and in the past, consent-based strategies seem especially attractive.*

# Defining a Consent-Based Process

- Who consents?
- To what is consent given?
- How is consent given and withdrawn?
- Benefits and burdens of consenting
  - Standard effects
  - Special effects

## CHARACTERISTICS OF CONSENT-BASED SITING PROCESSES

	Who consents?	To what is consent given?	How is consent given?	Positive standard effects	Negative special effects	Outcome
Canada	Local governments	Preliminary assessment of geology and community well-being	Expression of interest to the NWMO	Varies	Varies	Nine communities out of the initial 22 remain involved.
United States (WIPP)	City of Carlsbad, Eddy County, State of New Mexico	Siting a repository	Invitation/negotiated withdrawal of public land	High	Low	Repository constructed and operated in Eddy County outside of Carlsbad, New Mexico.
Finland	Municipality of Olkiluoto	Siting a repository	Acceptance of the Decision-in-Principle	High	Low	Decision-in-Principle adopted in 2001 selecting the Olkiluoto site near Eurajoki.
France	Communities in the Meuse/Haute-Marne region	Construction of a URL	Informal negotiations / non-binding referenda	High	Low	Site in Meuse/Haute-Marne near Bure designated in 2006 legislation.
Sweden	Municipality of Östhammar	Feasibility studies and site investigations	Municipal Council vote	Moderate	Low	SKB selected the Forsmark site near Östhammar in 2009.
United Kingdom	Cumbria County, Allerdale and Copeland Borough Councils	Desk-based studies	Agreement from all three councils	Unclear	High in the County but low in the Boroughs	Cumbria County Council decided to withdraw from the MRWS process; new approach adopted in 2014.
Japan	Local governments	Desk-based studies	Expression of interest to METI	Unclear	High	No one volunteered; new process announced in 2013.

# Consenting to the Disposal and Storage of HLW and SNF in the United States

- Interagency Review Group: “consultation and concurrence” morphed into “consultation and cooperation
- Office of the Nuclear Waste Negotiator terminated
- Private Fuel Storage facility abandoned

Two significant obstacles that will have to be overcome if a consent-based process is to be established in the future in the United States: (1) allocating power between the federal government and the states/communities; (2) trust in the implementer



## Elements of Successful Consent-Based Siting Processes

Beginning far in advance of a specific siting studies, dialogue and engagement with interested and affected parties to discuss the overall goals and objectives of national radioactive waste management programs

Multiple techniques and approaches to communicate and engage with interested and affected parties

Clear rules, agreed to in advance, governing the relationship between the implementer and a community

Establishment of a group broadly representative of the community to foster ongoing interactions with the implementer

Specification of the basis for when, why, and how a community can withdraw from the siting process

Sufficient funding to allow a community to participate fully in the process

Provision for independent review of the implementer's technical arguments either by experts chosen by the community or by an on-going external group

Responsiveness on the part of the implementer to questions and challenges from the community

Creation of a partnership between the community and the implementer to support repository development if the former agrees to host the facility

Some form of benefits package for the community