

Decommissioning

2005 and Beyond

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U. S. Decommissioning Efforts Over the Next Several Years

- Power reactors – 20 units at 19 sites
- 17 research and test reactors
- 43 complex materials sites
- 14 uranium mill tailings sites
- 3 Fuel cycle facilities

Source: Commissioner Merrifield's Keynote
Presentation to the NRC Decommissioning
Workshop April 21, 2005

License Termination Rule (LTR) (10 CFR 20 Subpart E) Governs Decommissioning

Unrestricted Use - 25mrem/yr* all contaminants, all pathways, ALARA – residual contamination

Restricted Conditions – can meet 25 mrem/yr* with Institutional Controls, Financial Assurance, Communication with Affected Parties; will not exceed 100 mrem/yr* or 500mrem/yr* if Institutional Controls fail

Alternate Criteria

*average member of critical group

LTR Guidance Revisions Being Considered

- **Institutional Controls (graded approach with respect to hazard and time frame)**
 - ✓ legally enforceable
 - ✓ durable controls
 - ✓ long term control license
 - ✓ possession only license
- **Realistic Dose Scenarios**
 - ✓ scenarios in addition to resident farmer

LTR Guidance Revisions Being Considered

- **Intentional Mixing**

- ✓ case by case
- ✓ footprint < original contamination
- ✓ no clean soil from offsite

- **Onsite Disposal**

- ✓ bury some in place
- ✓ 25 mrem/yr & ALARA
- ✓ short lived radionuclides

Inspection & Enforcement

- Improved Inspection & Enforcement Procedures
- Prevention of Future Legacy Sites

WEST VALLEY DEMONSTRATION PLANT

A Complex Site

- Will Use LTR Criteria
- Decommissioning Only Commercial U.S. Reprocessing Facility
- The Site Has:
 - HLW/LLW
 - 2 burial sites
 - Contaminated facilities
 - Ground water/soil contamination

West Valley, New York

Looking South





Maine Yankee undergoing decommissioning.



Rancho Seco, in Herald, California, operated between 1974 and 1989.



Trojan's reactor vessel being transported during decommissioning.



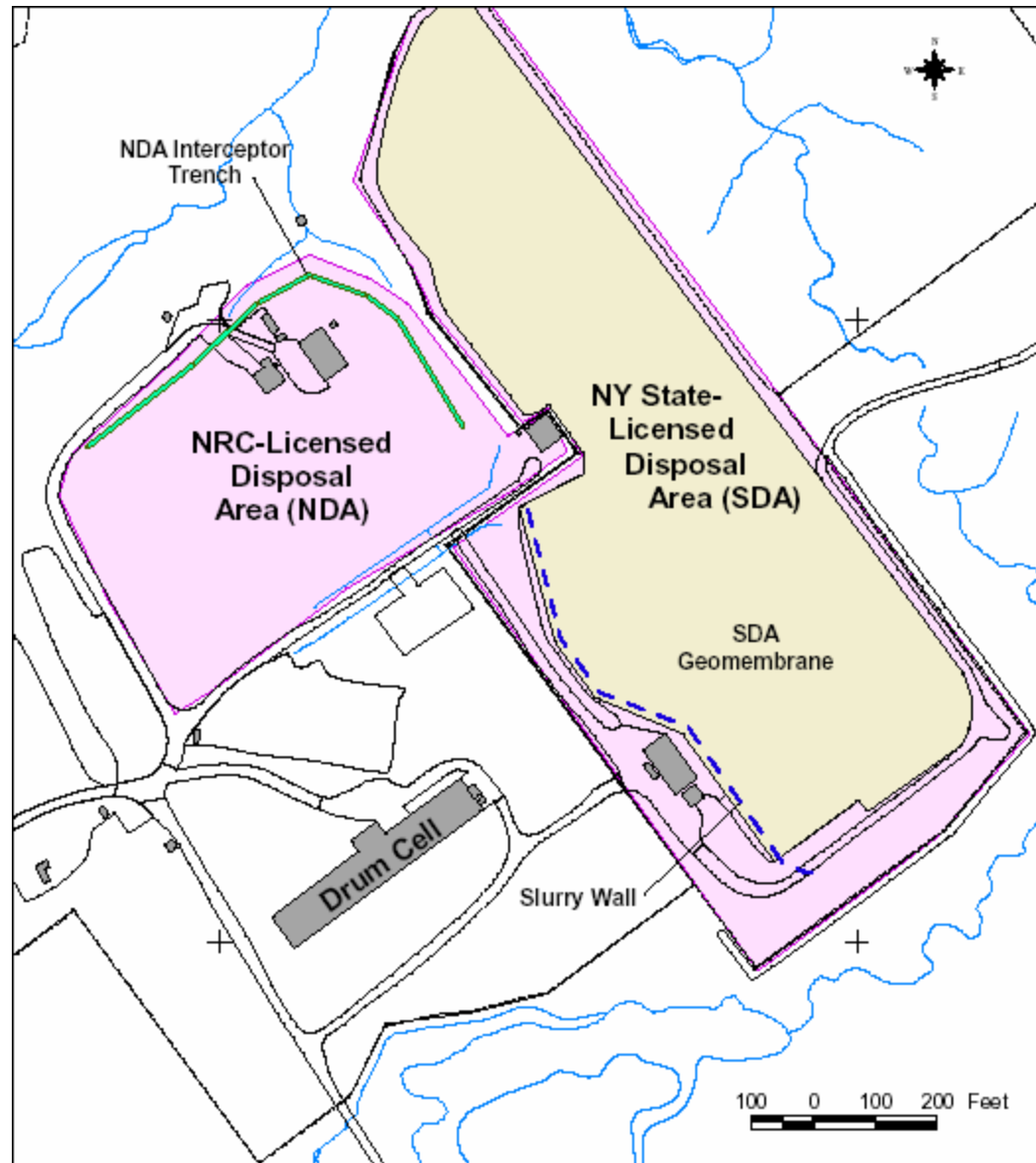
Big Rock Point.

Decommissioning Challenges

- Returning land to productive use
- Long-term management issues on restricted release sites
- Developing and documenting “lessons learned” for future evaluations

Backup Slides

South Plateau Burial Area



Project and Center Areas of Concern

