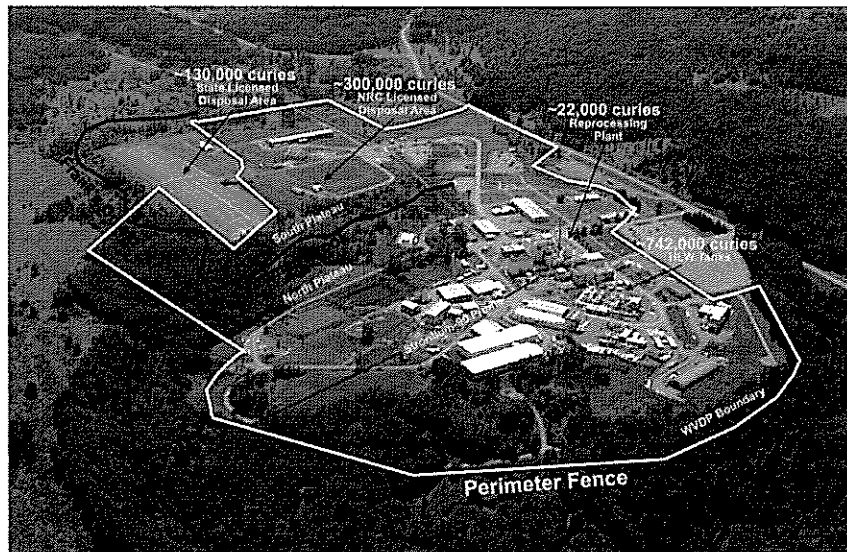


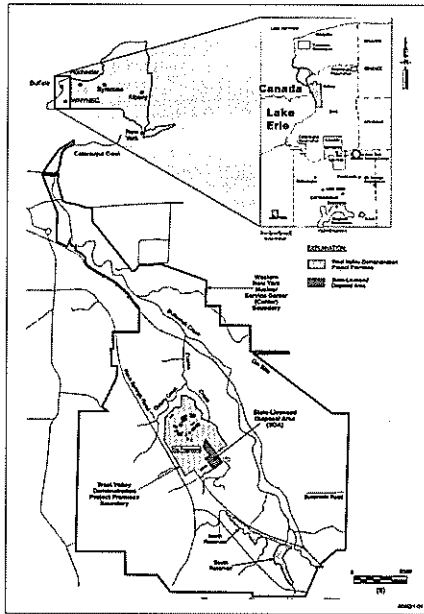
STATUS OF WEST VALLEY SITE DECOMMISSIONING

NRC briefing, Rockville MD
December 11, 2006

Raymond C. Vaughan
West Valley Citizen Task Force



West Valley site, main facilities



Site is south of Buffalo in WNY (western NY state)

Surface drainage descends 700 feet in 40 miles to Lake Erie; flows through rural/wild areas, WNY communities, and Seneca Nation of Indians

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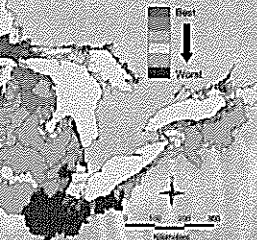


New Index of Environmental Condition for Coastal Watersheds in the Great Lakes Basin

INTRODUCTION

The Great Lakes is the largest system of surface freshwater on the earth. It contains about 20% of the earth's fresh water and about 90% of the freshwater in the United States. The wealth of natural resources has made this area a center of economic activity for the United States. From mining, forestry, and agriculture to recreation and shipping, human activities have taken a toll on the natural environment. In response to the continued degradation of the Great Lakes, the United States and Canada signed the Great Lakes Water Quality Agreement in 1972. The goal of this agreement was "restoring the chemical, physical and biological integrity of the waters of the Great Lakes Basin ecosystem" to achieve healthy populations of plants, fish, and wildlife and to protect human health. To monitor progress towards this goal, measurements of human-caused stress must be made over a period of time to evaluate changes in environmental condition.

U.S. Great Lakes Basin environmental condition by watershed



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West Valley site overview

Complex, interrelated site closure responsibilities:

- **Former reprocessing plant, two burial grounds, etc.**
- **U.S. DOE under WV Demonstration Project Act**
- **NYS Energy Research and Development Authority (NYSERDA)**

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Complex, interrelated law/regulation/oversight:

- **NRC, EPA, NYS DEC, NYS DOH**
- **WV Demonstration Project Act (1980)**
- **Part 50 license in abeyance during Demonstration Project**
- **LTR, WV Final Policy Statement, RCRA, etc.**

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Separate closure endpoints for DOE and NYSERDA

- **Decommissioning decisions still being made (EIS process approaching 20 years, still not complete)**
- **Current impasse between DOE and NYSERDA re: their respective responsibilities, validity of erosion modeling, etc.**

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EROSION

- **Uncontrolled erosion recognized as main threat to site integrity (Hundreds of years? Thousands of years?)**
- **Uncontrolled erosion will undercut site and will episodically deposit parcels of waste inventory into steep-gradient streams that flow to Lake Erie**

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1: Should DOE & NYSERDA Decommissioning Plans be concurrent or sequential?

If sequential, as NRC prefers:

- **Need uniform requirements for DOE and NYSERDA**
- **How can/should Part 50 license be reinstated during interim period?**

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2: Evaluation of erosion and radiological impacts

- **All evaluations need to be carried to peak dose (>1000 yr, as needed) (WV Final Policy Statement)**
- **All underlying assumptions, models, and methods of calculation need close attention**
- **Marginally acceptable impacts??**

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3: Distinction between decommissioning and disposal

- **WV Demonstration Project Act sets separate requirements for each**
- **Distinction may depend partly on the extent of barrier or vault construction (how elaborate, how essential?)**

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4: NRC should not authorize or condone reclassification (e.g., WIR) if contrary to law

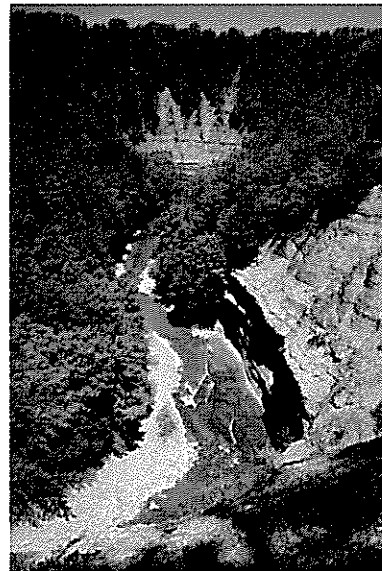
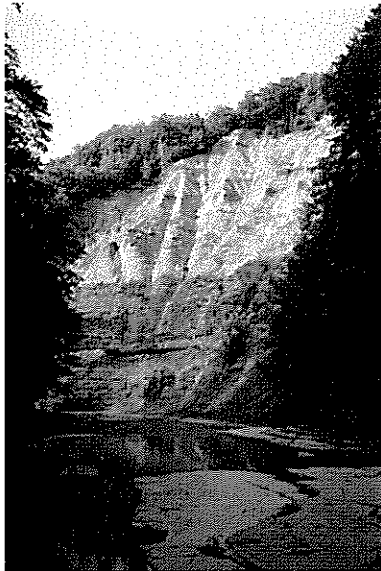
- **WV Demonstration Project Act defines waste categories: HLW, LLW, TRU**

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5: Sr-90-contaminated groundwater plume!

- **No apparent regulation (license in abeyance); plume keeps growing**
 - **DOE won't deal effectively with it**
 - **NYSERDA and NRC say they can't**
- **Is creating an increasingly large amount of soil that will need decommissioning**

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South Branch, Cattaraugus Creek

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