

# West Valley – EPA’s Role & Perspective - Then and Now

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# A Brief History in Time

- Regional Office involvement starts with EPA's Birth – States Assistance
- Before there was a WVDP or a CERCLA
- **Primary Focus on the State Licensed Burial Areas and Water Infiltration**
- NRC Seismic Requirements Enhanced – mid 1970s
- President Carter decides not to Reprocess
- Site Operator turns the site back to New York State

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**SUMMARY REPORT ON THE LOW-LEVEL  
RADIOACTIVE WASTE BURIAL SITE,  
WEST VALLEY, NEW YORK  
[1963 - 1975]**



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# EPA's Main Authorities

- WVDP Act 1980 – NEPA responsibilities
- The Clean Air Act – Radiological portion of the National Emissions Standards for Hazardous Air Pollutants (RadNESHAPs) – Applies to Federal Facilities such as WVDP. Sets limits on radionuclide air releases to the environment. Requires Federal operator to do annual reporting and get “approvals” for new sources and source modifications.



# Other Authorities/Influences

- Uranium Fuel Cycle Standards
- High Level Waste Standards
- Maximum Contaminant Levels for Radionuclides
- RCRA Authorities – Delegated to New York State

# How Do We Get a Regulatory Road Map & Then To A Solution?

- Regulator's Communication Plan – 2003
  - Two years of effort – All Federal & State Agencies
- Negotiating Toward a Final Solution -2003 – 2006
- EPA Regional Administrator Alan Steinberg proposes a path forward – June 2006
- NRC's Required Decommissioning Plan harmonized with Environmental Impact Statement and ROD.
- DOE EIS Lead – Other Federal & State Agencies act as “Cooperating Agencies.”



# Changing Directions

- Vitrification of Wastes is Completed in 2002 Successfully!
- Refocus to Decontamination and Decommissioning
- As such the West Valley Demonstration Project really changes to the West Valley Decontamination & Decommissioning Project



# Record of Decision - 2010

- Two Phases
- First Phase – 10 Years (originally 20)
  - Move vitrified canisters – originally dispose at Yucca
  - Remove most above-ground structures
  - Determine what to do with 4 tanks
  - Determine what to do with the shallow land burial areas
  - Large scale rad waste removal including contaminated buildings
- Second Phase
  - To largely be determined by the First Phase





# Today – Good, Bad & Ugly

- Record of Decision Achievement – Outlook is poor and failure is likely to achieve the 10 year Phase 1 goal
  - \$550 million of Phase 1 D&D requires ~\$50 million annually plus \$25 million per year in annual maintenance costs = ~\$75 million per year. Actual is less than \$48 million per year.
  - With a 20+ year Phase 1 lifetime necessitated by lowered funding levels \$250 million is added to the cost of the project.
  - Costs for Phase 2 will rise with erosion issues having meaningful environmental concerns



# Successes

- Exemplary Compliance with RadNESHAPs
- Innovative and Successful Approach for Controlling Sr-90 groundwater contamination
- Innovative technology for categorizing waste in tanks.
- Successful drying of the tanks – Eliminates immediacy of leaking tanks
- Regulatory Roundtable Approach brings timely focus to the DOE, the State, and the Regulators on issues.
- Public Involvement



# The Ugly

- 275 Vitrified HLW Canisters w/o Yucca Mountain
- Reducing the risk [drying tanks], controlling groundwater contamination, etc. has dropped this site in the eyes of those who hand out funding.
- Cattaraugus County is not down state New York.
- Lower funding levels for D&D at all Federal Agencies means much less money for all D&D ... and NYS is not in any better shape.



# Bottom Line 2013

This appears to be one of the best technically conceived and executed Federal projects (from the actual demonstration of the vitrification process through the decommissioning and decontamination phases) ever, but it appears that it will ultimately fail to meet its financial and scheduling goals!