



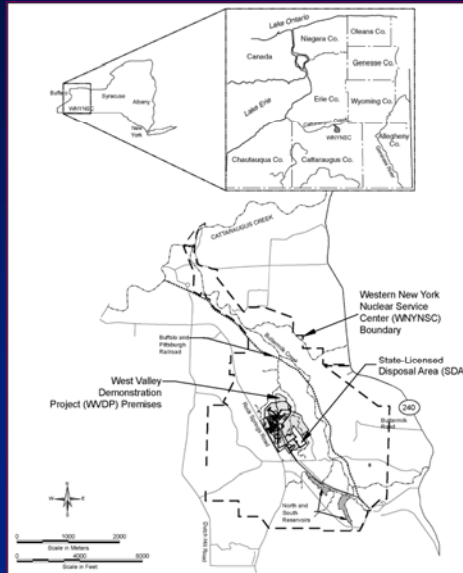
## Summary of NRC's Review of Phase 1 Decommissioning Plan for West Valley Demonstration Project



West Valley Citizen Task Force  
March 24, 2010



## The West Valley Site



## West Valley

- Complex decommissioning site
- Unique approach required by the West Valley Demonstration Project Act



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## Decommissioning Under WVDP Act

- WVDP decommissioning conducted in accordance with WVDP Act
- NRC prescribed decommissioning requirements pursuant to Section 2(a)(5) of the WVDP Act
  - NRC prescribed its License Termination Rule (LTR) as the decommissioning criteria in Policy Statement issued on February 1, 2002 (67 FR 5003)
  - Decommissioning Plan (DP) and Environmental Impact Statement (EIS) evaluated based on these criteria
- DOE obligated under the WVDP Act to submit DP for NRC review and comment
- NRC obligated to provide comments and specify with precision its objections to any provision of the plan
- NRC does not have approval authority of the DP as the DOE is not an NRC licensee

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## Relationship between Phase 1 DP and Decommissioning EIS

- DP is tied to current preferred alternative in Final EIS
- DP does not consider the SDA or WNYNSC outside of the project premises
- DP does not consider
- DP describes how cleanup criteria are met for Phase 1 of the preferred alternative
- If a different preferred alternative is selected in the ROD, the DP would need to be revised and re-submitted for NRC review

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## Phased Decisionmaking Alternative The Preferred Alternative

### *Phase 1*

- Main Plant Process Building, Vitrification Facility and 01-14 Building, source area of North Plateau Groundwater Plume and lagoons would be removed
- No decommissioning or long-term management decisions for Waste Tank Farm and support facilities, Construction Demolition and Debris Landfill, non-source area of the plume, or NRC-licensed Disposal Area



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## Phased Decisionmaking Alternative The Preferred Alternative

### Phase 1 (cont'd)

- Additional characterization and studies would be conducted to possibly reduce technical uncertainties related to the decision on final decommissioning and long-term management of the balance of WYNSC



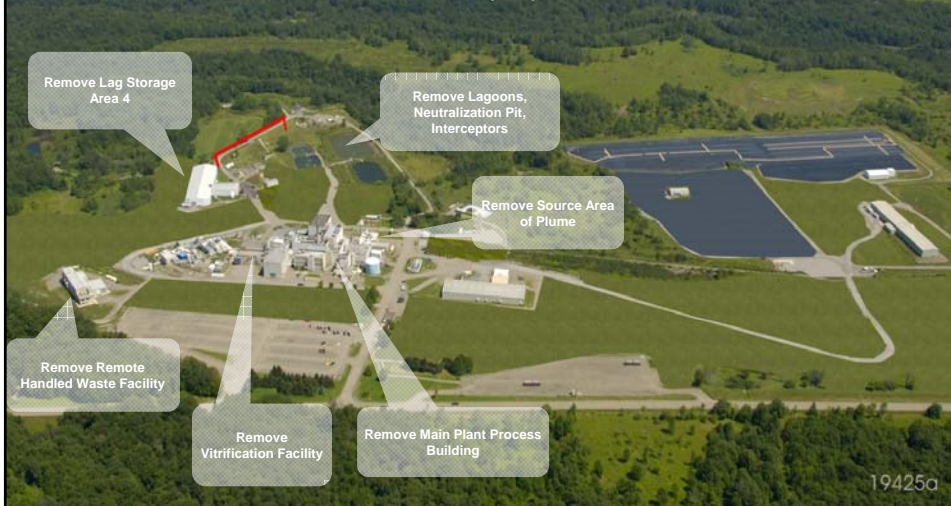
### Phase 2

- Decommissioning or long-term management decisionmaking would be completed, following the approach determined through Phase 1 evaluations

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## Phase 1 Activities

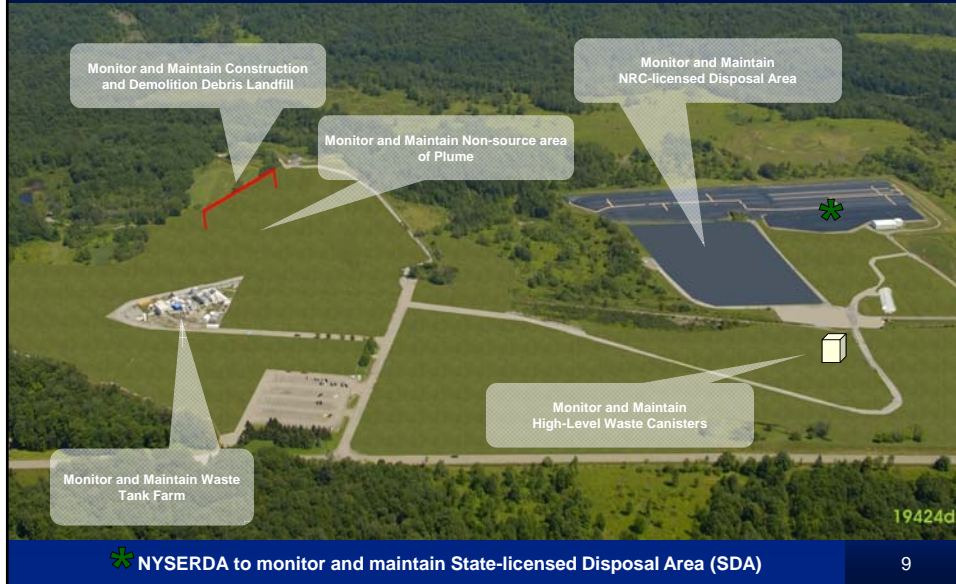
Most of remaining facilities will be removed; characterization and potential remediation of surface soils within Project premises



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## Phase 1 Activities Continued

Remaining facilities will be monitored and maintained in a safe condition until a Phase 2 decision is made



## Phase 1 Decommissioning Plan Review

- Phase 1 DP Approach NRC/DOE Public Scoping Meeting May 2008
- Phase 1 DP Dose Modeling Approach NRC/DOE Public Mtgs July, October 2008
- Phase 1 DP (Rev. 0) submitted December 2008
- Phase 1 DP (Rev. 1) submitted March 2009
- Request for additional information (RAI) issued May 2009
- RAI responses submitted August, September, November 2009
- Phase 1 DP (Rev. 2) submitted December 2009
- Technical Evaluation Report (TER) issued February 2010

## Phase 1 Decommissioning Plan Review Continued

- DP Review Objectives:
  - Determine whether proposed action in Phase 1 DP satisfies decommissioning criteria
  - Identify objections to any provision of the plan
- Review focused on relevant information to support review objectives
- TER documents NRC comments on Phase 1 DP

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## Phase 1 Decommissioning Plan Review

- Phase 1 DP sections (scope agreed upon during NRC/DOE public scoping meeting May 2008):
  - Introduction
  - Facility operating history
  - Facility description
  - Radiological status of facility
  - Dose analysis
  - ALARA
  - Planned decommissioning activities
  - Quality assurance
  - Facility radiation surveys

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## Phase I Decommissioning Plan Review Continued

- Qualitative Review Areas
  - Introduction, facility description and operating history, radiological status of facility, planned decommissioning activities, and quality assurance
  - Concluded sufficient information provided
- Technical Review Areas
  - Dose modeling for DCGL development, engineered barrier design, ALARA, and radiological surveys

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## Phase I Decommissioning Plan Review Continued

- Dose Modeling Conclusion
  - With a few noted exceptions, DOE provided adequate information on source term
  - DOE analyzed a range of exposure scenarios and appropriately selected the critical group
  - DOE's mathematical method and parameters used are appropriate for the scenarios evaluated and parameter uncertainty has been adequately addressed (with comments noted in TER)
  - NRC concluded that the dose to the average member of the critical group will be less than the unrestricted use criteria

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- Engineered Barriers Conclusion
  - NRC concluded that the proposed use of engineered barriers in Phase 1 is reasonable and appropriate
  - NRC expects to review more detailed engineered barrier designs when they are available

- ALARA Conclusion
    - NRC has reasonable assurance that ALARA criteria in 10 CFR 20.1402 will be met
  - Facility Radiation Surveys Conclusion
    - DOE provided conceptual information on radiological surveys to be conducted at the site
    - NRC concluded that characterization is needed to develop the final status survey plan (FSSP)
    - NRC expects to review and comment on these plans as they become available
- Note: NRC currently reviewing the FSSP and Characterization Sampling and Analysis Plan (CSAP)

## Phase I Decommissioning Plan Review Continued

- Ongoing Open Items to be Addressed During Decommissioning
  - Compliance with LTR for entire site will need to be re-evaluated following completion of Phase 2 decommissioning activities
  - Modeling assumptions will need to be verified during characterization or in-process surveys
  - Engineered barrier designs will need to be reviewed once they are developed by DOE
  - Radiologic survey plans need to be reviewed
  - NRC to provide input to Phase 1 studies
- Overall Conclusions
  - NRC staff determined that the Phase 1 DP provides reasonable assurance that the proposed action will meet the decommissioning criteria
  - No objections identified

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## NRC Stakeholder Interactions Related to Phase 1 DP Review

- NRC's Decommissioning Plan (DP) review was an open process
  - Meetings on Phase 1 DP
    - Staff held seven publicly noticed meetings
  - NRC Considered Stakeholder Comments
    - Over 100 comments received
    - Comments informed staff review and many incorporated into NRC's RAI

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## Next Steps

- Review of information collected during the Phase 1 studies
- Agency input on Phase 2 decision
- Review and action on Phase 2 DP

**Back-up Slides  
Posters Presented at Public Meeting in  
September 2009  
(content does not reflect final TER conclusions)**