

2010 Final EIS Preferred Alternative: The Phased Decisionmaking Alternative

Introduction

In 1990, the U.S. Department of Energy (DOE) and the New York State Energy Research and Development Authority (NYSEERDA) entered into a supplemental agreement to prepare an environmental impact statement (EIS) to address both the completion of the West Valley Demonstration Project (WVDP) and closure or long-term management of the Western New York Nuclear Service Center (WNYNSC).

After issuance of a draft EIS in 1996, DOE and NYSEERDA in 2001 announced a revised EIS strategy. Under the revised strategy, DOE and NYSEERDA, as co-lead preparers, issued a draft EIS in 2008 and, in 2010, issued the *Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center* (DOE/EIS-0226) (2010 FEIS). As described in DOE's 2010 Record of Decision (ROD) and NYSEERDA's Findings Statement, DOE and NYSEERDA decided to implement the Phased Decisionmaking Alternative based on information and analyses contained in the 2010 FEIS.

What is happening during Phase 1?

During implementation of Phase 1 of the Phased Decisionmaking Alternative, which is ongoing, a number of highly contaminated facilities at the West Valley Site are being removed. Specifically, Phase 1 includes facility disposition and soil remediation:

Phase 1A: Facility Disposition

- Relocate high-level waste canisters to long-term interim storage
- Process, ship, and dispose of all legacy waste, not including transuranic (TRU) waste
- Demolish and remove the Main Plant Process Building (MPPB) and the Vitrification Facility to grade
- Demolish and remove ancillary facilities



Phase 1B: Soil Remediation

- Remove slabs and below-grade portions of the MPPB, the source area of the plume, and Vitrification Facility in Waste Management Area (WMA) 1
- Remove Low-Level Waste Treatment Facility 2 and the lagoons in WMA 2
- Ship the legacy TRU waste once a disposal facility is available
- Remove the Remote-Handled Waste Facility and remaining waste storage facilities (after shipment of TRU waste)
- Remediate soil in WMAs 1 and 2



What is the relationship between Phase 1 and Phase 2?

The Phased Decisionmaking Alternative deferred decisions (known as Phase 2 decisions) on several facilities for 10 years (while Phase 1 decommissioning activities were ongoing) and while DOE and NYSEERDA gather additional information and perform additional analyses (Phase 1 Studies) to foster inter-agency consensus and inform the decisions.

The following facilities and areas remain at the end of Phase 1:

- Waste Tank Farm
- Non-Source Area of the North Plateau Groundwater Plume
- Cesium Prong
- Balance of the WNYNSC property
- U.S. Nuclear Regulatory Commission-Licensed Disposal Area
- Construction and Demolition Debris Landfill
- Contaminated Stream Sediments
- State-Licensed Disposal Area

What are the Phase 1 Studies?

Following the 2010 FEIS, DOE and NYSERDA established a process for conducting scientific studies (the Phase 1 Studies) to facilitate interagency consensus to complete decommissioning of the remaining facilities. Subject-matter expert working groups were established and studies conducted on topics such as erosion modeling, the geomorphic history of the site, geologic material properties, site radiological inventory, and precedent waste exhumation projects/technologies. Phase 1 Studies and the Probabilistic Performance Assessment (PPA) will inform the SEIS and the Phase 2 decisions.

How does the 2010 FEIS relate to the SEIS to be prepared for the West Valley Site?

The SEIS will supplement the analyses contained within the 2010 FEIS. Where appropriate, the SEIS will summarize and incorporate by reference information and analyses from the 2010 FEIS through a process known as “tiering.” The SEIS will also contain new information and analyses, including the results of the Phase 1 Studies and Probabilistic Performance Assessment, to ensure its adequacy for Phase 2 decisionmaking.



Note: This is an artist concept of the site at the end of Phase 1.