

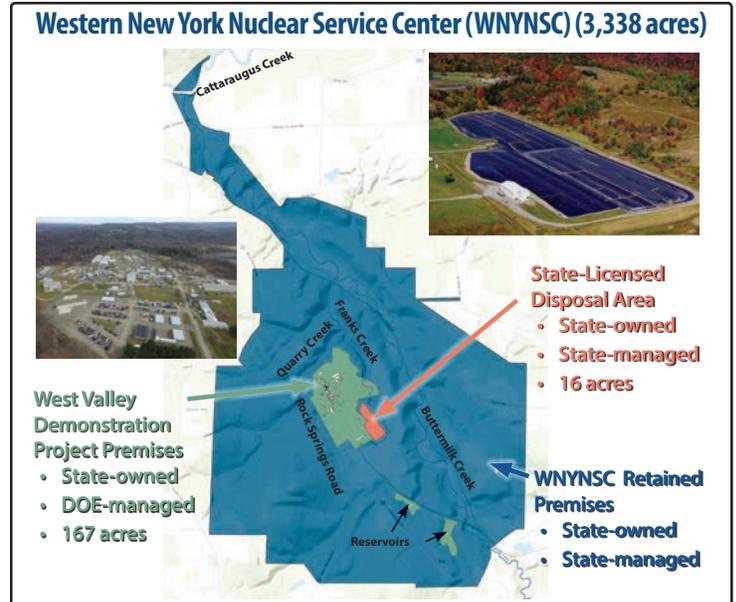
The West Valley Site

What is the history of the site?

The Western New York Nuclear Service Center (WNYNSC) is a 1,351-hectare (3,338-acre) site located 48 kilometers (30 miles) south of Buffalo, NY, and owned by New York State Energy Research and Development Authority (NYSERDA). In 1962, Nuclear Fuel Services, Inc. (NFS) entered into Agreements with the Atomic Energy Commission and New York State to construct the first commercial reprocessing plant of nuclear fuel in the United States. NFS, a private company, built and operated the fuel reprocessing plant and burial grounds, processing 640 metric tons of spent nuclear fuel at the WNYNSC from 1966 to 1972 under an Atomic Energy Commission license.

Fuel reprocessing ended in 1972, when the plant was shut down for modifications. In 1976, in view of increased costs and regulatory requirements, NFS decided to exercise its contractual right to yield responsibility for the WNYNSC to the State of New York. NFS withdrew without removing any of the in-process nuclear wastes. NYSERDA now holds title to and manages the WNYNSC.

In 1980, Congress passed the West Valley Demonstration Project (WVDP) Act. The WVDP Act requires the U.S. Department of Energy (DOE) to demonstrate that the liquid high-level radioactive waste (HLW) from reprocessing could be safely managed by solidifying it at the WNYNSC and transporting it to a repository for permanent disposal.



DOE and NYSERDA entered into a Cooperative Agreement that established a framework for implementing the WVDP. Under the agreement, NYSERDA has made available to DOE, without transfer of title, a 68-hectare (167-acre) area of the WNYNSC, known as the “Project Premises,” which includes:

North Plateau of the Project Premises:

- Former NFS spent nuclear fuel reprocessing plant
- WVDP Vitrification Facility
- Construction and Demolition Debris Landfill (CDDL)
- Waste Tank Farm
- Liquid low-level waste treatment facility and lagoons
- Waste Storage Facilities
- Remote Handled Waste Facility
- North Plateau Groundwater Plume

South Plateau of the Project Premises includes:

- NRC-Licensed Disposal Area (NDA)
- Radwaste Treatment System Drum Cell
- High-Level Waste Cask Storage Pad

Most of the facilities on the Project Premises were radioactively contaminated from reprocessing operations and are located on a geographic area known as the North Plateau. Among the other facilities located within the Project Premises is the NDA, a radioactive waste disposal area. Adjacent to the Project Premises is the State-Licensed Disposal Area (SDA) radioactive waste disposal area, for which NYSERDA has operational responsibility. Both the NDA and SDA are located on a geographic area known as the South Plateau.

What portion is “the West Valley Site” for the purpose of the Supplemental Environmental Impact Statement?

For the purposes of this Supplemental Environmental Impact Statement, the West Valley Site includes the WNYNSC, the WVDP, and the SDA. Phase 2 decommissioning includes the decontamination and decommissioning of the facilities remaining at the West Valley Site after completion of Phase 1 decommissioning.

High-Level Waste (HLW) Cask Storage Pad

NRC-Licensed Disposal Area (NDA)

State-Licensed Disposal Area (SDA)



Location of the Cesium Prong

Waste Tank Farm

Non-Source Area of the North Plateau Groundwater Plume

Construction and Demolition Debris Landfill (CDDL)

What are some site features of note?

The WVDP converted liquid HLW into vitrified glass, safely encapsulating 25 million curies of radioactivity into a stable waste form currently stored on site in concrete casks. The West Valley Site also has soil, building, and groundwater contamination and buried radioactive waste. Removal of this contamination and waste could expose workers and the public to risks from radioactivity and other hazards. Phase 2 decisionmakers must consider such short-term risks as well as

the potential long-term risks from leaving contamination or waste in place. Much of the remaining waste is underground in the Waste Tank Farm, NDA, and SDA, and the West Valley Site is surrounded by and/or traversed by several creeks. Therefore, the effect of erosion is a consideration in the analysis of potential long-term impacts from any contamination or waste that may be left in place.