Last Updated: October 2006

# Western New York Nuclear Service Center

EPA ID Number: NYD986905545

## Other (Former) Names of Site

Nuclear Fuels Service (NFS)

## **Site Description**

This 3,300-acre site is located at 10282 Rock Springs Road in West Valley, New York and owned by New York State Energy Research & Development Authority (NYSERDA). A 167-acre portion is operated by the U.S. Department of Energy (See "West Valley Demonstration Project"). NYSERDA is also responsible for a 15-acre commercial low-level radioactive waste (LLRW) State-licensed Disposal Area (SDA) located within the Service Center property.

The SDA was operated from 1963 until 1975, when waste-disposal operations ceased. Approximately 2.4 million cubic feet of LLRW was disposed in a series of 14 trenches. The source of the waste included institutions, industries, government facilities, nuclear power plants, waste brokers, Nuclear Fuel Services, and decontamination facilities. Between 1975 and present, a number of investigations and remedial activities have taken place to evaluate and mitigate releases from the SDA trenches.

### Site Responsibility and Legal Instrument

Resource Conservation and Recovery Act (RCRA) 3008(h) Order on Consent (Docket No. II, RCRA 3008(h)-92-0202) issued in 1992 jointly by New York State Department of Environmental Conservation (NYSDEC) and USEPA. (The SDA is also operated pursuant to an NYS Department of Health Radioactive Materials License, and an NYSDEC Part 380 Radiation Permit.)

#### Permit Status

Facility has RCRA Interim Status pursuant to State of New York (6 NYCRR) Part 373 Standards for Owners and Operators of Hazardous Waste Facilities.

## **Potential Threats and Contaminants**

Before and during the investigations, water levels in some of the State-licensed Disposal Area (SDA) trenches were rising at a rate which threatened release of leachate (a mixture of waste and water) into the environment. The leachate contains radioactive and hazardous constituents, including volatile and semi-volatile organic compounds. During disposal operations, leachate was pumped out of the trenches to a series of lagoons for treatment and discharge. As a result of a leachate migration and subsequent release in 1975, disposal operations were permanently suspended. In

1991, to alleviate rising leachate levels in Trench 14, 7,400 gallons of leachate were pumped into an above-ground tank. New York State Energy Research & Development Authority (NYSERDA) subsequently installed 40,000 gallons of additional storage capacity using above-ground tanks. To date, it has not been necessary to use this additional storage capacity.

## **Cleanup Approach and Progress**

A Resource Conservation and Recovery Act (RCRA) investigation (which included groundwater monitoring, soil, sediment and surface water monitoring) determined that there have not been significant releases of hazardous (or radioactive) constituents to the environment. However, to mitigate long-term increases in leachate levels at the State-licensed Disposal Area (SDA), New York State Energy Research & Development Authority (NYSERDA) installed a barrier (slurry) wall and placed a geo-membrane cover over Trenches 12, 13 and 14 in 1992.

In 1995, the cover system was expanded to include the remainder of the trenches, except for Trench 9. Trench 9 was involved in a pilot test which involved the use of juniper plants to reduce infiltration. The pilot test was terminated in the spring of 1999 and the junipers were replaced with the geo-membrane cover in fall of 1999. Since initial installation of the barrier wall and cover system, leachate levels have remained stable.

NYSERDA will continue to perform long-term maintenance and monitoring at the SDA evaluating groundwater quality and leachate levels. Final Corrective Measures are being evaluated for the SDA as part of an on-going Environmental Impact Statement (EIS). The EIS also includes decommissioning and decontamination of the 200-acre portion that is operated by the U.S. Department of Energy.

### **Site Repository**

Copies of supporting technical documents and correspondence cited in this site fact sheet are available for public review at:

NYSDEC Division of Solid & Hazardous Materials 625 Broadway, 9<sup>th</sup> Floor Albany, NY 12233-7252

NYSDEC Region 9 Office 270 Michigan Avenue Buffalo, NY 14203-2999