

**New York State Department of Environmental Conservation**

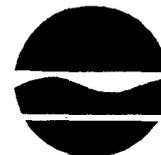
**Division of Solid & Hazardous Materials**

Bureau of Hazardous Waste and Radiation Management, 9<sup>th</sup> Floor

625 Broadway, Albany, NY 12233-7258

Phone: (518) 402-8594 • Fax: (518) 402-9024

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Alexander B. Grannis  
Commissioner

April 27, 2009

Ms. Rebecca Tadesse, Chief  
Division of Waste Management and Environmental Protection  
Office of Federal and State Materials and Environmental Management Programs  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Mr. Bryan C. Bower, Director  
West Valley Demonstration Project  
U.S Department of Energy  
10282 Rock Springs Road  
West Valley, NY 14171-9799

Dear Ms Tadesse and Mr. Bower:

Re: NYSDEC Comments on the *Phase 1 Decommissioning Plan for the West Valley Demonstration Project* dated December 3, 2008.

Enclosed please find the New York State Department of Environmental Conservation's (Department) comments for the U.S. Department of Energy's *Phase 1 Decommissioning Plan for the West Valley Demonstration Project*.

The Department appreciates this opportunity to provide input into the decommissioning process.

Should you have any questions please contact myself or David O'Hehir at (518) 402-8579.

Sincerely,

Timothy B. Rice  
Section Chief  
Radiological Sites Section

Enc.

cc: Andrea Mellon, NYSERDA  
Paul Paciulo, NYSERDA  
Paul Bembia, NYSERDA  
Paul Giardina, USEPA  
Jeannette Eng, USEPA  
Gary Baker, NYSDOH  
Keith McConnell, USNRC  
Chad Glenn, USNRC  
Moir Maloney, USDOE  
Patrick Concanon, Region 9

Ecc: E. Dassati, NYSDEC  
R. Phaneauf, NYSDEC  
David O'Hehir, NYSDEC  
Lynn Winterberger, NYSDEC

New York State Department of Environmental Conservation Comments on U.S. Department of Energy's *Phase 1 Decommissioning Plan for the West Valley Demonstration Project*.

*Comment #1: General: Derived Cleanup Guidance Levels* - The use of multiple depth dependant soil DCGLs is not appropriate under most circumstances since they could become problematic over time and should be reconsidered. The Department recognizes that the use of a subsurface DCGL may be appropriate in certain limited circumstances, such as beneath the location of the Main Plant Process Building where the excavation and fill would extend over 40 feet below ground surface. However, we do not support the general use of a subsurface DCGL for all soil greater than 3 feet in depth. Gullying and slumping are common erosional processes at the site which over time are likely to expose areas of subsurface soil deeper than the proposed three feet. This would increase exposure to individuals above that which would occur based on an acceptable surface soil DCGL. An example of where this is likely to become a problem is the ongoing slumping of the stream gully wall adjacent to the water treatment lagoons.

*Comment #2: General: Derived Cleanup Guidance Levels* - The streams and creeks at the site are seasonal and part or all of the streambeds are often dry. The use of a stream sediment DCGL greater than a surface soil DCGL is non-conservative under these circumstances and would be inappropriate. The characteristics of an exposed streambed are more representative of a surface soil exposure pathway and should be treated as such.

*Comment #3: Executive Summary ES-7, Waste Management Area 3, the Waste Tank Farm Area* - It is stated that all four tanks will be empty with a tank vault drying system in place. This is misleading as the tanks will be liquid free due to the drying system but the radioactive/hazardous material will still be present in a dry form on the tank bottoms and walls.

*Comment #4: Footnote 7, page 1-9* - The footnote states that the year 2041 was chosen since that was the year that shipments of the HLW would begin to the federal geologic repository. Recent policy changes within the Federal Government have called into question the availability of such a repository. The DP should be modified to reflect this change.

*Comment #5: Table 2-3, page 2-3* - Table is missing headers for all columns.

*Comment #6: Table 2-5, pages 2-9 to 2-11* - Y-90 and Ba-137m appear to be incorrectly assigned "Note 3: Not present or undetectable." The correct note for these radionuclides should be Note 4.

*Comment #7: WMA 3: Waste Tank Farm Area, page 3-12 - 16* - The description of WMA 3: Waste Tank Farm Area, does not include a description of the Supernatant Treatment System (STS). The STS should be described, either as a separate system or as part of the tank 8D-1 description.

*Comment #8: Footnote 4, page 3-31* – The footnote states that the “village is an unincorporated area,” in New York State villages are an incorporated part of government.

*Comment #9: Radioactivity in WMA 1, the Process Building, page 4-18* – The paragraph states that the total curies presented for each vitrified canister is the sum of the Sr-90 and Cs-137 values listed. While it is understood that these are the primary components, a list of the other radionuclides should be provided in order to better understand the actual contents and the overall impact of the vitrified canisters.

*Comment #10: 4.2.2 Background Levels, page 4-25* – The DOE completed the WVDP North Plateau Background Soil Characterization Report in December 2008 after the release of the DP. The data generated in this report should be used to supplement the information provided in the DP and updated as necessary.

*Comment #11: 4.2.5 Radionuclide Concentration Exceeding Background in the Surface, Soil, Sediment, and Subsurface by WMA, page 4-35* – The WVDP North Plateau RCRA Characterization Report is due to be released in April 2009 by the DOE. This report will include RCRA characterization data and radionuclide data from geoprobes and borings both below the MPPB and in the North Plateau Plume. The data generated in this report should be used to supplement the information provided in the DP and updated as necessary.