



Department of Energy
West Valley Demonstration Project
10282 Rock Springs Road
West Valley, NY 14171-9799

March 16, 2009

Dr. Keith I. McConnell, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
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

SUBJECT: Submission of Revision 1 to the Phase 1 Decommissioning Plan for the
West Valley Demonstration Project for U.S. Nuclear Regulatory Commission Review

REFERENCE: Letter (100126), C. V. Anderson to K. I. McConnell, "Submission of the Phase 1
Decommissioning Plan (DP) for West Valley Demonstration Project (WVDP) for U.S.
Nuclear Regulatory Commission (NRC) Review," dated December 3, 2008

Dear Dr. McConnell:

Enclosed is Revision 1 to the Phase 1 DP for the WVDP for NRC review and comment. This revision, submitted in accordance with U.S. Department of Energy's (DOE) above-referenced letter, incorporates radiological data from additional characterization of subsurface soil in the area of the North Plateau groundwater plume and includes the results of additional groundwater modeling to determine flow velocities and gradients and predict the effects of engineered barriers to be installed during Phase 1 of the decommissioning.

To that end, enclosed are twenty copies of Revision 1, along with 20 compact disks. Each compact disk contains an electronic copy of Revision 1, an electronic copy of the complete DP with Revision 1 incorporated, a Microsoft Excel[®] spreadsheet that makes up new Attachment 2 to Appendix C, and two new references that are cited in Revision 1.

Revision Content

Revision 1 incorporates the additional subsurface soil and groundwater radiological characterization data, the results of the additional groundwater modeling, and several other minor changes. A detailed list of these changes is provided in the Record of Revision page that follows the plan cover. A new List of Effective Pages following the Record of Revision page identifies those pages included in Revision 1 and those that remain Revision 0. Changes to the text, tables, and figures on the Revision 1 pages are marked with a vertical line in the right margin. New and revised words appear in blue to facilitate review.

Among the Revision 1 changes are refinements in the preliminary dose assessments for the remediated Waste Management Area (WMA) 1 and WMA 2 excavations. These refined preliminary dose estimates are as follows:

- WMA 1 excavated area: a maximum of 1.3 millirem per year (was 1.0); and
- WMA 2 excavated area: a maximum of 0.04 millirem per year (was 0.08).



March 16, 2009

The revised preliminary dose assessment for WMA 1 made use of radiological data collected during the 2008 North Plateau Background Subsurface Soil Characterization Program and the Resource Conservation and Recovery Act (RCRA)-regulated Constituent Subsurface Sampling Program. (None of the additional characterization data applied to the WMA 2 excavation). As explained on page 5-51, both refined dose estimates take into account decay of Strontium 90 and Cesium 137 over a 30-year period to be consistent with the approach used for developing derived concentration guideline levels.

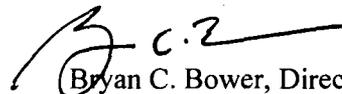
Please note that evaluation of the 2008 subsurface soil data led to the re-analysis in March 2009 of several samples that had elevated minimum detectable concentrations. The final validated data from these re-analyzed samples were not available in time to incorporate into Revision 1. These data will be incorporated into Revision 2 to the plan, which is expected to also include changes associated with DOE responses to NRC's requests for information. Incorporation of the re-analyzed sample data will require revisions to several sections and appendices.

Please note also that many of the pages in Revision 1 contain no actual changes but are included because of page registration changes resulting from Revision 1 changes on the preceding pages. However, the affect of Revision 1 on the page numbers cited in the annotated decommissioning plan checklist in Appendix A is limited to a few Section 4 pages, which are identified in the revision.

For Further Information

Please let DOE know if NRC needs any additional references or other information for its review of Revision 1 to the plan. Please refer any questions about this submittal to Moira Maloney of my staff at (716) 942-4255.

Sincerely,



Bryan C. Bower, Director
West Valley Demonstration Project

- Enclosures: 1. Revision 1 to the Phase 1 DP for the WVDP (20 copies)
2. Compact Disk (20 copies)

cc: M. J. Letourneau, DOE-HQ, EM-11, CLOV, w/enc.
M. C. Moore, DOE-HQ, EM-3.3, FORS, w/enc.
C. P. Murnane, DOE-HQ, EM-3.3/FORS, w/enc.
M. N. Maloney, DOE-WVDP, AC-DOE, w/enc.
L. Camper, NRC, w/o enc.
C. Glen, NRC, w/o enc.
R. Tadesse, NRC, w/o enc.
P. J. Bembia, NYSERDA (6 copies)

Reading Rooms: (w/enc.)

U.S. Dept. of Energy, FOIA Reading Room (DOE-HQ, Room 1E-190)
Hulbert Library, Springville, NY
Ashford Office Complex Public Reading Room (West Valley, NY)