

June 2, 2008

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

SUBJECT: REPORT OF MAY 19, 2008 MEETING WITH U.S. DEPARTMENT OF  
ENERGY TO DISCUSS THE WEST VALLEY DEMONSTRATION  
PROJECT PHASE 1 DECOMMISSIONING PLAN

Dear Mr. Bower:

On May 19, 2008, the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE) met to discuss the scope of DOE's Phase 1 Decommissioning Plan for the West Valley Demonstration Project. The meeting report is enclosed. This information is also available on NRC's public meeting website: <http://www.nrc.gov/about-nrc/regulatory/decommissioning/public-involve.html>

If you have any questions related to this matter, please contact Chad Glenn of my staff at 301-415-6722.

Sincerely,

**/CGlenn for RA/**

Rebecca Tadesse, Chief  
Materials Decommissioning Branch  
Decommissioning and Uranium Recovery  
Licensing Directorate  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No.: P-32

Enclosure:  
Meeting Report

cc w/encl: West Valley List

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Date	6/2/08	6/2/08	6/2/08	/ /

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West Valley List

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C/O Seth Wochensky or Judith Einach  
PO Box 603  
Springville, NY 14141

**May 19, 2008 DOE-NRC Meeting Report on the  
DOE West Valley Demonstration Project Phase 1 Decommissioning Plan  
NRC Executive Boulevard Building, Room E-1-B13/B15  
6003 Executive Boulevard, Rockville MD**

## **Introduction**

On May 19, 2008, the U.S. Nuclear Regulatory Commission (NRC) and U.S. Department of Energy (DOE) staff met to discuss the scope and content of the Phase 1 Decommissioning Plan (DP) for the West Valley Demonstration Project (WVDP). DOE is decommissioning the WVDP in accordance with the 1980 WVDP Act. In February 2002, NRC issued a Final Policy Statement with decommissioning criteria for the WVDP. Under the authority of the WVDP Act, NRC prescribed the License Termination Rule (LTR) (10 CFR part 20, subpart E) as the decommissioning criteria for the WVDP, reflecting the fact that the applicable decommissioning goal for the entire NRC-licensed site is in compliance with the requirements of the LTR. DOE plans to prepare a DP describing how it intends to meet the LTR consistent with the Policy Statement. NRC interactions related to decommissioning under the WVDP Act are guided by *NRC Guidelines for Future Stakeholder Interactions on West Valley*. These guidelines were transmitted to DOE and other Stakeholders in October 2000, and generally provide that meetings related to NRC's WVDP Act review and consultative responsibility will be publicly noticed and open to public observation.

In addition to NRC and DOE staff, attendees included representatives of the New York State Energy Research and Development Authority (NYSERDA), New York State Department of Environmental Conservation (NYSDEC), West Valley Citizen Task Force (WVCTF), and Coalition on West Valley Nuclear Wastes. The agenda is located at ML081200239, and the presentations for this meeting are located at ML081360603, ML081510336, and ML081360482. The list of attendees is included as Attachment 1 (ML081510335), and DOE's revised annotated checklist identifying information to be addressed in the WVDP Phase 1 DP is included as Attachment 2 (ML081500214).

## **Opening Remarks**

NRC welcomed all stakeholders to this meeting. NRC recognized NYSERDA as a special stakeholder as owner and licensee of the site. As such, NYSERDA has a clear and unique interest in WVDP decommissioning activities. NRC encouraged NYSERDA and DOE to continue to work together to advance the decommissioning process at the West Valley site. NRC added that the views of NYSERDA, and other stakeholders, will continue to be valued through this process. NRC also noted that DOE is not a licensee, and NRC does not regulate DOE. DOE welcomed and expressed its appreciation to all stakeholders attending this meeting. DOE stated its plan to submit a WVDP Phase 1 DP to NRC in late Fall 2008 around the same time frame it plans to issue the Draft Environmental Impact Statement (EIS) for public comment.

## **Discussion**

This section identifies the topics of discussion and provides a general overview of NRC and DOE presentations, including miscellaneous discussion points.

Enclosure

## 1. Overview of Decommissioning Process

NRC provided an overview of the process for the submittal and review of DOE's Phase 1 DP under the WVDP Act and DOE-NRC Memorandum of Understanding (MOU) developed in accordance with the WVDP Act. In this overview, NRC reviewed opportunities for public involvement and transparency of the process. NRC stated that meetings related to the DP will be noticed and open to the public and observers will have an opportunity to provide comments at these meetings. In addition, documentation associated with the process will be made available for public inspection at several points in the process. Specifically, the WVDP Act requires DOE to notice (through publication in the Federal Register) and make available for public inspection: (1) the DP (upon submission to NRC); (2) NRC comments on the DP (upon receipt by DOE); and (3) a detailed statement explaining any DOE decision not to revise the DP to meet any objections specified in NRC's comments. NRC also plans to make any Request for Additional information and DOE's response to such requests available to the public. NRC comments and any objections to the DP will be based upon NRC's Technical Evaluation Report, which will also be publicly available once it is completed.

## 2. Regulatory Framework for WVDP DP

DOE provided an overview of the unique regulatory framework for the WVDP Phase 1 DP. DOE stated that WVDP decommissioning will be conducted under the WVDP Act and the DOE-NRC MOU. DOE explained that the proposed action in the WVDP Phase 1 DP is the same as the proposed preferred alternative in the Draft EIS. DOE noted that this DP is intended to demonstrate that Phase 1 decommissioning activities will be conducted in accordance with NRC's decommissioning requirements. DOE added that the DP will focus on information that supports this demonstration, such as: planned decommissioning activities, dose modeling, "as low as is reasonably achievable" (ALARA) analysis, and the Final Status Survey.

## 3. Proposed Actions in the WVDP Phase1 DP

DOE described the proposed WVDP Phase 1 decommissioning approach that will implement the proposed preferred alternative in the Draft EIS. Phased decommissioning is designed to support phased decommissioning of the WVDP. Decommissioning of the WVDP will be conducted in two phases. DOE stated that Phase 1 decommissioning will be completed in a manner that ensures that all decommissioning options (e.g., ongoing license, restricted use, and unrestricted release) are available for Phase 2 decommissioning. DOE described the proposed Phase 1 decommissioning actions. DOE also noted that Phase 2 decommissioning will address the final disposition of the Waste Tank Farm (WTF), the NRC-licensed Disposal Area (NDA), and the non-source area of the North Plateau Plume (NPP).

In this presentation, DOE also noted an editorial error in the first bullet on slide 30. DOE stated that the word "restricted" should be "unrestricted."

## 4. Proposed Annotated Checklist for WVDP Phase 1 DP

See Attachment 2 for DOE's introductory remarks on this topic. Please note that the yellow highlights in this attachment represent changes to the checklist based on discussions in the May 19, 2008 scoping meeting.

## Miscellaneous Points of Discussion:

- NRC asked for clarification regarding the depth of the excavation into the lavery till in those cases where subgrade structures extended into the lavery till (i.e., if excavations would extend to depths greater than one to two feet into the lavery till if necessary to meet the Derived Concentration Guideline Levels (DCGLs).
- NRC asked for clarification regarding the extent of the lavery till sand underneath the Main Plant Process Building and lagoon areas and potential outcrop locations near Erdmann Brook. DOE stated that it would provide information regarding the extent of the lavery till sand and stated that monitoring data showed the lavery till sand was not contaminated. NRC expects DOE to provide information regarding the hydrogeological conceptual model for the North Plateau to support Phase 1 decommissioning activities including monitoring data that indicates the nature and extent of contamination within the lavery till including the lavery till sand.
- DOE clarified that the excavation under the Process Building would extend to the down gradient hydraulic barrier, and that the excavation area is planned to remove all residual radioactivity associated with the North Plateau plume within Waste Management Area (WMA) 1.
- DOE clarified that areas outside of Lagoons 1, 2, and 3 would also be excavated down to the lavery till within the proposed hydraulic barrier wall in WMA 2.
- NRC emphasized that affected environment (i.e., Chapter 3 of Draft EIS and sections within the facility description of the DP) and unrestricted release criteria sections of the DP should demonstrate DOE's understanding of the potential cumulative impacts of source areas (e.g., potential overlap of groundwater contamination emanating from various source areas).
- NRC noted that it expects DOE will revise the post-remediation environmental monitoring plan as a result of, and to consider the impacts of, Phase 1 remedial actions (e.g., changes to water-levels, flow paths, and direction) and to ensure that previously cleaned areas are not recontaminated (e.g., hydraulic barrier constructed around Lagoons 1, 2, and 3 will prevent potential recontamination of groundwater from NPP).<sup>1</sup> DOE agreed to include information regarding engineered barriers; and monitoring and maintenance activities during the ongoing assessment period as a separate appendix or appendices in the DP.
- NRC recommended that DOE model the effects of any engineered barriers implemented or relied on as part of the phased decommissioning approach (e.g., hydrologic barriers proposed for Phase 1 down gradient of Process Building and NW of Lagoon 1, 2, and 3 area excavation) to ensure that DOE understands the affects of the engineered barriers on the groundwater flow system and the expected performance of the systems, and that no unintended, adverse impacts result from their construction. DOE indicated that this modeling would be performed and documented in the Draft EIS.
- NRC stated that Section XVI (Restricted Release/Alternate Criteria) of the DP Annotated Checklist and associated information requirements should be removed since this information is not relevant for Phase 1.

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<sup>1</sup> Although not specifically discussed in the meeting, NRC expect that DOE will provide information needed to evaluate the expected performance of engineered barriers constructed or relied on for Phase 1 decommissioning including as-built properties. The DP should describe what information DOE plans to collect and provide to interested stakeholders regarding the as-built properties of the engineered barriers, as well as any monitoring and maintenance activities planned during the ongoing assessment period. DOE agreed to include monitoring and maintenance information as a separate appendix in the DP.

- NRC recommended that the focus of the radioactive waste management portion of the DP be on ensuring that controls are in place to prevent contamination of on-site or off-site locations, or recontamination of previously cleaned areas of the site.
- DOE clarified that cleanup in the non-source area of NPP would be limited to removal of concrete slabs, surface soils, and Lagoons 4 and 5 liners, and would not include remediation of sub-surface contamination in soils or groundwater. For example, DOE acknowledged that subsurface contamination under Lagoons 4 and 5 would not be cleaned to unrestricted use criteria and noted that the final disposition of the non-source area of NPP is a Phase 2 decision.
- DOE intends to characterize surface residual radioactivity outside of the Phase 2 source areas (e.g., WTF, NDA, non-source area of NPP, and NPP impacted areas) and potentially remediate to unrestricted use DCGLs. NRC stated that DOE should describe its planned characterization activities during Phase 1 decommissioning activities.
- NRC indicated that information on spills that may have lead to releases into the environment should be included in the DP.

### **Observer Comment**

NYSERDA's representatives expressed the following comments, questions, or concerns:

- Inquired about receptor scenario and basis for DCGLs of 25 mrem/yr.
- Inquired if confirmatory surveys would be conducted and documented.
- Inquired if radiological survey plans for the Bulk Storage Warehouse could be addressed in conjunction with the WVDP Phase 1 DP.
- Inquired about further remediation of NPP during Phase 1 decommissioning to mitigate the potential for offsite releases. DOE responded by describing planned actions within the near future to intercept the plume and mitigate surface water impacts (e.g., reactive barrier, and permeable treatment wall).
- Reiterated need to consider erosion with a supported erosion model for the long-term performance assessment.

NYSDEC's representative expressed the following comments, questions, or concerns:

- Noted that Resources Conservation and Recovery Act (RCRA) requirements may necessitate additional cleanup beyond DCGLs for residual radioactivity.
- Commented that spill information would be needed for RCRA reviews.

WVCTF's representative expressed the following comments, questions, or concerns:

- Cleanup to unrestricted use also requires an ALARA demonstration.
- Need to establish nature and extent of any residual radiological contamination in the Kent Recessional unit.
- Environmental monitoring and controls should be addressed in annotated checklist.
- WVDP Act requirements in Section 2(a)(4) for disposal of LLW and transuranic (TRU) in accordance with applicable licensing need to be met and should be acknowledged in the DP.
- WVDP Phase 1 DP should not address institutional controls since the cleanup level is based on unrestricted use (meaning no institutional controls)

- Contribution of residual radioactivity from the State-licensed Disposal Area needs to be considered in verifying that NRC-licensed site meets the LTR.
- Modeling support for all alternatives needs to be adequate to support decision making.
- Any site-wide integrated dose assessment in the Draft EIS must be supported by a credible erosion model.
- DOE's planned removal of the LLW treatment facility needs to be fully supported.

Coalition of West Valley Nuclear Wastes' representative expressed the following comments, questions, or concerns:

- Expressed concern with phased decommissioning approach.
- Commented that the site should have been cleaned up many years ago.
- Cleanup needs to be based on site-wide (not WVDP) evaluation.
- Concerned about segmentation of NEPA process.
- Commented that LTR criteria are not adequate for the West Valley site.
- Removal of LLW treatment facility during Phase 1 would be unwise and pre-mature.

### **Follow up Actions**

- DOE proposed follow up meeting on derivation of DCGLs
- NRC to forward NRC's April 7, 2004 letter in response to observer request.

Attachments:

1. Attendees list
2. Revised Annotated Checklist

Decommissioning Plan Annotated Checklist  
Revised

Attachment 2

**ML081500214**