

July 15, 2010

MEETING SUMMARY

MEMORANDUM TO: Paul Michalak, Branch 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

FROM: Chad Glenn, Senior Project Manager /RA/  
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

SUBJECT: TECHNICAL MEETING SUMMARY

On June 10, 2010, representatives of the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE) West Valley Demonstration Project (WVDP) met in Rockville, MD. The purpose of the meeting was to discuss DOE's response to NRC's Technical Evaluation Report comments on the Phase 1 Decommissioning Plan for the WVDP. The meeting summary is enclosed. This information is also available on NRC's public meeting website at <http://www.nrc.gov/about-nrc/regulatory/decommissioning/public-involve.html>.

Docket No.: P-32

Enclosure: Meeting Summary

CONTACT: Chad Glenn, FSME/DWMEP  
(301) 415-6722

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## **JUNE 10, 2010, U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION MEETING SUMMARY**

### **Introduction:**

On June 10, 2010, the U.S. Department of Energy (DOE) and U.S. Nuclear Regulatory Commission (NRC) met to discuss DOE's response to NRC's Technical Evaluation Report (TER) comments on the Phase 1 Decommissioning Plan (DP) for the West Valley Demonstration Project (WVDP). In this discussion, DOE also committed to complete specific actions to disposition NRC's TER comments (Comment Status Table, Attachment 1).

In addition to DOE and NRC staff, meeting attendees included representatives of the New York State Energy Research and Development Authority (NYSERDA), New York State Department of Environmental Conservation (NYSDEC), U.S. Environmental Protection Agency (EPA), Citizens' Environmental Coalition, and Nuclear Information and Resource Service (Attendees List, Attachment 2).

The meeting notice and agenda (accession number ML101410173), NRC's TER comments and DOE's responses (accession numbers ML100360030 and ML101550199), and meeting presentation material (accession number ML101590550) are available in NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

### **Discussion:**

In the technical discussion related to DOE's TER response, NRC stated that DOE's response provides an acceptable approach to the disposition of TER comments. However, it is recognized that most comments will remain open pending completion of future DOE actions. NRC also clarified that it expects to continue to review and provide comments at appropriate points in the decommissioning process.

NRC intends to track the disposition of TER comments as an extension of the DP review process. The attached table has been developed to track the completion of DOE actions based on discussions in this meeting. In this table, the "NRC TER Comment" and "Slide #" columns correspond to the June 10 presentation material. The "DOE Commitment" column reflects actions committed to during this meeting. The "Duration" column refers to DOE's expected time frame for completing the commitment. Short term duration indicates DOE commitments that are expected to be completed before September 2010, and long term duration indicates DOE commitments that are expected to be completed after September 2010. The "Completion Date" column refers to the date when both DOE and NRC agree that the action has been completed.

### **Observer Comments/Questions and Responses:**

- A Citizens' Environmental Coalition representative commented that if the purpose of the Phase 1 Characterization Sampling and Analysis Plan (CSAP) is to inform a Phase 2 decision, the commenter sees no evidence that the CSAP will inform a Phase 2

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decision. DOE responded that the CSAP is not a Phase 1 study designed to inform a Phase 2 decision. Rather, the CSAP implements a Phase 1 radiological characterization activity discussed in the Phased 1 DP.

- A Nuclear Information and Resource Service representative inquired if DOE has Quality Assurance plans that cover WVDP work? DOE responded and clarified that it has Quality Assurance plans for existing DOE WVDP activities. However, DOE is developing additional Quality Assurance plan(s) that specifically cover CSAP and Final Status Survey Plan (FSSP) activities.

Attachments:

1. Comment Status Table
2. Attendees List

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**Status of Action Items Associated with the June 10, 2010 DOE/NRC Public Meeting to Address NRC Comments in the 2/25/10 Technical Evaluation Report for the Phase 1 Decommissioning Plan for the WVDP.**

| <b>NRC TER Comment</b> | <b>Slide #</b> | <b>DOE Commitment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Duration</b> | <b>Completion Date</b> |
|------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|
| 1                      | 8              | Provide all Phase 1 studies to NRC for review and comment similar to the NRC review of the DP since these are considered by NRC to be an extension to the Decommissioning Plan                                                                                                                                                                                                                                                                                                                                                                                           | Long Term       |                        |
| 2                      | 9              | Consider the cumulative impacts of all source areas within the project premises, including any previously remediated Phase 1 areas, to demonstrate compliance with the LTR criteria at final decommissioning.<br><br>Re-evaluate the ability of the site to meet the LTR criteria at final decommissioning and assess whether Phase 1 soil characterization, Phase 1 studies, or in-process surveys invalidate modeling assumptions or underestimate risk.                                                                                                               | Long Term       |                        |
| 3                      | 10             | Evaluate the lateral and vertical extent of contamination in soil and stream sediment within the project premises during Phase 1 soil characterization activities described in the Characterization Sampling and Analysis Plan (CSAP).<br><br>Soil and stream sediment sampling results will be used to evaluate whether the subsurface soil and streambed sediment conceptual models are valid. If the source geometries are found to be substantially different from the assumed conceptual models, the conceptual models will be revised and the DCGLs re-calculated. | Long Term       |                        |
| 4                      | 11             | QA and QC procedures will provide appropriate quality control for use of surrogate radionuclides to ensure that dose is not underestimated if one or more surrogate radionuclides are used.                                                                                                                                                                                                                                                                                                                                                                              | Long Term       |                        |

**Status of Action Items Associated with the June 10, 2010 DOE/NRC Public Meeting to Address NRC Comments in the 2/25/10 Technical Evaluation Report for the Phase 1 Decommissioning Plan for the WVDP.**

| <b>NRC TER Comment</b> | <b>Slide #</b> | <b>DOE Commitment</b>                                                                                                                                                                                                                                                    | <b>Duration</b> | <b>Completion Date</b> |
|------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|
| 5                      | 12             | Provide to NRC the revised calculation package DPlan-SAIC-JDP-003 providing flow balances for the screened interval of the well and horizontal flow area at the base of the well to provide additional support for upward flux of contamination due solely to diffusion. | Short Term      |                        |
| 6                      | 13             | Provide to NRC for technical review the final designs of the engineered barriers and associated monitoring systems before their installation as required by the Decommissioning Plan.                                                                                    | Long Term       |                        |
| 7                      | 14 - 15        | No further action.                                                                                                                                                                                                                                                       |                 | 6/10/2010              |
| 8                      | 16 - 17        | When the Decommissioning Plan is revised for other reasons, expand the discussion of the treatment of uncertainty in distribution coefficients used in development of subsurface soil DCGLs.                                                                             | Long Term       |                        |
| 9                      | 18             | Perform sensitivity analyses related to the multi-source model for subsurface soil DCGLs after more soil contamination data become available and include the results in a revision to the Decommissioning Plan.                                                          | Long Term       |                        |
| 10                     | 19             | Include in a future revision to the Decommissioning Plan a discussion of the basis for using the Buttermilk Creek watershed area in developing streambed sediment DCGLs.                                                                                                 | Long Term       |                        |
| 11                     | 20             | No further action. However, the DP is a living document and the NRC will provide input through Phase 1.                                                                                                                                                                  | Long Term       |                        |
| 12                     | 21             | Potential radon impacts and the practicality of incorporating radon mitigation techniques into structures within the project premises will be considered if a close-in-place scenario is selected for Phase 2 decommissioning.                                           | Long Term       |                        |
| 13                     | 22             | Provide QA Project Plans for characterization and for Phase 1 of the decommissioning to NRC for review and comment.                                                                                                                                                      | Long Term       |                        |

**Status of Action Items Associated with the June 10, 2010 DOE/NRC Public Meeting to Address NRC Comments in the 2/25/10 Technical Evaluation Report for the Phase 1 Decommissioning Plan for the WVDP.**

| <b>NRC TER Comment</b> | <b>Slide #</b> | <b>DOE Commitment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Duration</b> | <b>Completion Date</b> |
|------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|
| 14                     | 23             | Provide responses to NRC comments on the CSAP and FSSP and the recommended changes to the plans to NRC in late July 2010.                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Short Term      |                        |
| 15                     | 24             | Provide responses to NRC comments on the CSAP and FSSP and the recommended changes to the plans to NRC in late July 2010.                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Short Term      |                        |
|                        |                | Revise the FSSP as necessary after completion of characterization and provide the revised plan to NRC for review and comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Long Term       |                        |
| Other 1                | 25 -26         | Provide to NRC the revised calculation package EIS-SAIC-JDP-001 that includes sensitivity analyses of a drinking water scenario based on the 1986 Tank 8D-2 sampling campaign inventory and inclusion of Cs-135 in the detailed analysis.                                                                                                                                                                                                                                                                                                                                         | Short Term      |                        |
| Other 2                | 27             | If streambed sediment is to be remediated in Phase 1, revise the Decommissioning Plan accordingly and provide the revision to NRC for review and comment.                                                                                                                                                                                                                                                                                                                                                                                                                         | Long Term       |                        |
| Other 3                | 28             | <p>In-process surveys will be performed along the bottom and sides of the WMA 1 and WMA 2 excavations.</p> <p>Characterization surveys will be performed along selected H-piles within the Lavery till beneath soils impacted by the North Plateau Plume to evaluate whether radionuclides from the plume migrated downward along the H-piles.</p> <p>If surveys along the excavation bottoms and sides or along the H-piles indicate elevated activity exceeding the subsurface soil cleanup goals, additional soil will be removed as required by the Decommissioning Plan.</p> | Long Term       |                        |

**Status of Action Items Associated with the June 10, 2010 DOE/NRC Public Meeting to Address NRC Comments in the 2/25/10 Technical Evaluation Report for the Phase 1 Decommissioning Plan for the WVDP.**

| <b>NRC TER Comment</b> | <b>Slide #</b> | <b>DOE Commitment</b>                                                                                                                                                                                                                                                                                                                                                               | <b>Duration</b> | <b>Completion Date</b> |
|------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|
| Other 4                | 29             | Perform a final dose evaluation of the remediated WMA 1 and WMA 2 excavations as required by the Decommissioning Plan and provide the results to NRC.                                                                                                                                                                                                                               | Long Term       |                        |
| Other 5                | 30             | Calculation of potential doses at downgradient locations to provide an indication of the available safety margin remaining for Phase 2 decommissioning activities will be addressed during the Phase 2 decision process for the project premises.                                                                                                                                   | Long Term       |                        |
| Other 6                | 31             | Provide to NRC for technical review the final design details, performance goals, and supporting technical basis for the Phase 1 hydraulic barriers, French drain, and associated monitoring system when these designs have been completed by the Phase 1 decommissioning contractor and before their installation as required by the Decommissioning Plan.                          | Long Term       |                        |
| Other 7                | 32             | The Phase 2 DP will consider the cumulative impacts of all source areas within the project premises, including the remediated Phase 1 areas, to demonstrate compliance with the LTR criteria at final decommissioning. Depending on the final Phase 2 decision, it is understood that Phase 1 areas may need further remediation in the unlikely event they become re-contaminated. | Long Term       |                        |
| Other 8                | 33             | Provide the detailed ALARA analysis performed during implementation of Phase 1 decommissioning activities as required by the Decommissioning Plan and provide it to NRC for review and comment.                                                                                                                                                                                     | Long Term       |                        |

## LIST OF PARTICIPANTS

Date: June 10, 2010

Meeting: Meeting to Discuss DOE Response to NRC Technical Evaluation Report Comments  
on Phas1 Decommissioning Plan

| NAME            | ORGANIZATION                                | PHONE NUMBER OR EMAIL<br>(WORK)                                            |
|-----------------|---------------------------------------------|----------------------------------------------------------------------------|
| Chad Glenn      | NRC                                         | <a href="mailto:Chad.glenn@nrc.gov">Chad.glenn@nrc.gov</a>                 |
| Duane Schmidt   | NRC                                         | <a href="mailto:Duane.schmidt@nrc.gov">Duane.schmidt@nrc.gov</a>           |
| Jim Hammelman   | SAIC                                        | <a href="mailto:James.e.hammelman@saic.com">James.e.hammelman@saic.com</a> |
| Lisa London     | NRC                                         | <a href="mailto:Lisa.london@nrc.gov">Lisa.london@nrc.gov</a>               |
| Zintars Zadins  | SAIC                                        | <a href="mailto:Zintars.zadins@wv.doe.gov">Zintars.zadins@wv.doe.gov</a>   |
| Joseph D. Price | SAIC                                        | <a href="mailto:Joseph.d.price@saic.com">Joseph.d.price@saic.com</a>       |
| Cynthia S. Barr | NRC                                         | 301-415-4015                                                               |
| Coleda Holston  | NRC                                         | 301-415-5508                                                               |
| Bruce Watson    | NRC                                         | 301-415-6621                                                               |
| Keith McConnell | NRC                                         | 301-415-7295                                                               |
| Harry Fatkin    | SAIC                                        | <a href="mailto:Harry.w.fatkin@saic.com">Harry.w.fatkin@saic.com</a>       |
| Maira Maloney   | DOE                                         | <a href="mailto:Maira.n.maloney@wv.doe.gov">Maira.n.maloney@wv.doe.gov</a> |
| Bryan Bower     | DOE                                         | <a href="mailto:Bryan.bower@wv.doe.gov">Bryan.bower@wv.doe.gov</a>         |
| Mark Bellis     | DOE                                         | <a href="mailto:Mark.bellis@wv.doe.gov">Mark.bellis@wv.doe.gov</a>         |
| Paul L. Piciulo | NYSERDA                                     | <a href="mailto:plp@nyserda.org">plp@nyserda.org</a>                       |
| Jim McNeil      | URS Washington Group                        | Via phone                                                                  |
| Jeanette Eng    | EPA                                         | Via phone                                                                  |
| David O'hehir   | NYSDEC                                      | Via phone                                                                  |
| Robert Johnson  | Argonne National Lab.                       | Via phone                                                                  |
| Barbara Warren  | Citizens' Environmental Coalition           | Via phone                                                                  |
| Diane D'Arrigo  | Nuclear Information and<br>Resource Service | Via phone                                                                  |
| Dan Schultheisz | EPA                                         | Via phone                                                                  |
| Sue Crede       | SAIC                                        | Via phone                                                                  |
| Lisa Durham     | Argonne National Lab.                       | Via phone                                                                  |