

From: Hansen, Amanda

Sent: Thursday, November 01, 2012 8:44 AM

To: [REDACTED]

Cc: Maloney, Moira

Subject: NOVEMBER QUARTERLY PUBLIC MEETING (QPM) AGENDA

Ms. Hameister,

Please find the subject letter attached.

If you have any questions, please contact me.

Thanks,

Amanda Hansen

Contractor

U.S. Department of Energy

[REDACTED]



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

November 1, 2012

Ms. Joanne E. Hameister
Coalition on West Valley Nuclear Wastes
1051 Sweet Road
East Aurora, NY 14052

SUBJECT: November Quarterly Public Meeting (QPM) Agenda

REFERENCE: Email (358496), J. E. Hameister to B. C. Bower, "November QPM Agenda," dated October 14, 2012

Dear Ms. Hameister:

The U.S. Department of Energy (DOE) appreciates your continued interest in monitoring the progress of decommissioning activities at the West Valley Demonstration Project (WVDP). The November 14, 2012 QPM will have a full agenda including the WVDP Project Update, the 2011 Annual Site Environmental Report (ASER) update, and the Phase 1 Studies Climate Change Workshop climate change guidance document. The Project Update portion of the QPM will include a discussion of recently completed site characterization activities at the WVDP performed under the *Phase 1 Characterization Sampling and Analysis Plan for the West Valley Demonstration Project* (CSAP).

Safety & Ecology Corporation (SEC), DOE's Environmental Characterization Services contractor, completed an overland gamma survey and collected soil samples for radiological characterization from the proposed location of the High-Level Waste (HLW) Canister Storage Area and from the Maintenance Triangle and Product Storage Areas, two WVDP balance of site facilities (BOSF) that were recently removed by CH2M HILL B&W West Valley, LLC (CHBWV), DOE's Phase 1 Decommissioning Facility Disposition Contractor. SEC is currently preparing the final study reports which are scheduled to be submitted to DOE in December 2012.

As part of its characterization activities, SEC proposed the use of two reference areas within the Western New York Nuclear Service Center (WNYNSC) retained premises, one on Thornwood Drive and the other west of the WNYNSC Bulk Storage Warehouse, to support its CSAP data collection activities. Both of these proposed reference areas are located near the Fox Valley Road air sampling station. Historical soil sampling data collected from the Fox Valley Road station and the Great Valley air sampling station, which is the designated background soil sampling location for the WVDP site environmental monitoring program, were statistically evaluated and the Fox Valley Road radionuclide data was found to be statistically indistinguishable from the Great Valley background soil data within a 95 percent confidence interval.

These reference areas were used to develop background gamma survey data sets to support the collection of overland gamma survey data within the project premises and to evaluate the performance of the field instrument gamma detectors that would be used to perform overland gamma surveys at the WVDP. Soil samples were also collected from 10 locations from both reference areas to establish background radionuclide data sets for statistical tests that may be



used during final status surveys and to evaluate background concentrations and distributions of naturally occurring radionuclides. SEC statistically evaluated the soil data from both reference areas and the Great Valley air sampling station using a student t-test. The mean radionuclide concentration from both reference areas was found to be either less than or equal to the mean concentrations from Great Valley within a 95 percent confidence interval. A detailed description of the use of reference areas is provided in Section 8.0 of the CSAP.

As you know, in 2003, the U.S. Nuclear Regulatory Commission (NRC) announced in its Final Policy Statement their decision to apply its license termination rule (10 CFR 20, Subpart E) as the decommissioning criteria for the WVDP and WNYNSC. The DOE developed the *Phase 1 Decommissioning Plan for the West Valley Demonstration Project* (DP) to be consistent with the NRC license termination rule criteria for unrestricted release of 25 millirem per year total effective dose equivalent.

Surface soil, subsurface soil, and streambed sediment Derived Concentration Guideline Levels (DCGL) and Cleanup Goal (CG) concentrations for 18 radionuclides of interest (ROI) were developed in the DP. The DCGL concentrations for each ROI in the DP are representative of a total effective dose equivalent of 25 millirem per year to the critical member of the public. The CG concentrations in the DP that will be used during Phase 1 Decommissioning are more conservative from a public dose perspective than the DCGLs and are 45% to 90% of the DCGL concentrations.

The soil background data from the reference areas will be used to account for the deposition of man-made radionuclides (Cs-137, Sr-90, Plutonium isotopes) resulting from pre-1963 nuclear weapons testing fallout and for naturally occurring radionuclides in soil such as U-235 and U-238 in the soil concentration results obtained from within the project premises. The mean concentrations of the ROI from the reference areas are typically less than 2% of their respective CGs. The exceptions are I-129, whose mean reference area concentration is approximately 49% of its CG, and C-14, U-233/234, and U-238 which are at 10% of their respective CGs.

The CSAP does not concentrate on the characterization of Waste Management Area (WMA) 1 and WMA 2. The CSAP describes a comprehensive characterization program for all WMA's within the WVDP project premises, with the exception of WMA 8 and WMA 11, as described in Appendices A through K of the CSAP. WMA 8, the State-Licensed Disposal Area (SDA), and WMA 11, the Bulk Storage Warehouse Area and Hydrofracture Test Well Area, are not part of the WVDP and are not being decommissioned under the DP.

Stream sediment sampling to evaluate the presence and the lateral and vertical extent of radiological contamination in Erdman Brook and Frank's Creek within the project premises is described in Appendix J of the CSAP. The Erosion Working Group (EWG) presented its proposed erosion study recommendations at the August 22, 2012 QPM. Their study recommendations included the collection of additional geologic, geomorphic, fluvial, and age dating data to support the refinement of the Channel-Hillslope Integrated Landscape Development (CHILD) landscape evolution model. None of the EWG recommended studies required the collection of radiological data from the streams within the project premises. If the EWG or any other Phase 1 Study working group requires CSAP soil or streambed radiological

Ms. Joanne E. Hameister

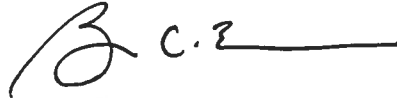
- 3 -

November 1, 2012

characterization data in the future to complete its studies, DOE and NYSERDA will provide them the data.

Should you have any questions or comments regarding this transmittal, please contact Moira Maloney of my staff at (716) 942-4255.

Sincerely,

A handwritten signature in black ink, appearing to read "B.C.B.", with a long horizontal line extending to the right.

Bryan C. Bower, Director
West Valley Demonstration Project

cc: P. J. Bembia, NYSERDA, AC-NYS
L. M. Gordon, NYSERDA, AC-NYS
E. A. Lowes, NYSERDA, AC-NYS
A. L. Mellon, NYSERDA, AC-NYS

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