



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

February 7, 2011

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: U.S. Department of Energy (DOE) Responses to U.S. Nuclear Regulatory Commission (NRC) Comments on the DOE Responses to NRC Comments on the Phase 1 Final Status Survey Plan (FSSP) and Phase 1 Characterization Sampling and Analysis Plan (CSAP) for the West Valley Demonstration Project (WVDP)

REFERENCE: Letter (104430), K. I. McConnell to B. C. Bower, "Responses to the U.S. Nuclear Regulatory Commission Comments on Phase 1 Final Status Survey Plan and Characterization Sampling and Analysis Plan for West Valley Demonstration Project." dated January 18, 2011

Dear Dr. McConnell:

DOE acknowledges NRC's review of the DOE October 21, 2010 responses to the NRC comments on the FSSP and the CSAP.

NRC had comments on two of the DOE responses:

1. DOE Response to FSSP Comment 5

NRC comment: "It is not clear to what extent DOE will account for the dose contribution from radionuclides removed from consideration during the FSS process."

DOE response: The following text will be added to the FSSP:

"To ensure that dose contributions of all radionuclides removed from consideration are adequately addressed during the FSS process, DOE will, on an area-by-area basis, determine the average relative derived concentration guideline level wide area (DCGL_w) sum of ratios (SOR) contribution for radionuclides of interest (after adjusting for average background conditions) that are considered insignificant for a particular area using CSAP data. The DCGL_w SOR requirement will be reduced by that amount for that area during the FSS evaluation for those radionuclides retained as part of the FSS process.

As an example, if Pu-241 and Am-241 were measurable in CSAP results for an area but, on average, contributed only 2% and 3%, respectively, to the overall DCGL_w SOR calculation they would be dropped from the FSS analytical list for that area. The DCGL_w SOR standard for that area would be reduced from 1.0 to 0.95 in the FSS process to reflect the missing dose contribution of Pu-241 and Am-241."



2. DOE Response to CSAP Comment 4

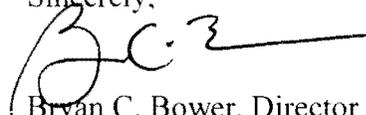
NRC comment: "The NRC comment relates to the unresolved NYSERDA Comment 21 (Refer to NYSERDA letter dated November 23, 2010 – ML103350673). NRC anticipates the DOE response to NYSERDA."

DOE response: The DOE responded to the unresolved New York State Energy Research and Development Authority (NYSERDA) CSAP Comment 21 in a January 19, 2011 letter from B. C. Bower (DOE) to P. J. Bembia (NYSERDA). The response is provided below and the letter is enclosed to this submittal for NRC review.

"The remaining issue was the proposed approach for determining whether sample results were inconsistent with background assumptions during CSAP data collection (Comment #21). On the basis of NYSERDA's concerns, the methodology proposed by the CSAP will be modified to use the background 95% upper tolerance level (UTL), as determined by reference area sampling for those radionuclides that have measurable activity concentrations in background surface soils, as the point of comparison for determining whether a sample result is inconsistent with background. In addition, text will be added to state that if false positive rates for difficult-to-measure radionuclides such as Pu-239 prove unacceptable as CSAP field work progresses using this revised methodology, this decision may be revisited."

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

Sincerely,



Bryan C. Bower, Director
West Valley Demonstration Project

Enclosure: Letter ZZZ:104380 – 450.4, B. C. Bower to P. J. Bembia, "U.S. Department of Energy (DOE) Response to the November 23, 2010 New York State Energy Research and Development Authority (NYSERDA) Unresolved Comment on the Phase 1 Characterization Sampling and Analysis Plan (CSAP) for the West Valley Demonstration Project (WVDP)," dated January 19, 2011

cc: M. S. Bellis, DOE-EMCBC, AC-DOE, w/enc.
M. N. Maloney, DOE-WVDP, AC-DOE, w/enc.
P. A. Giardina, EPA, w/enc.
C. Glenn, NRC, w/enc.
T. Rice, NYSDEC, w/enc.
S. Gavitt, NYSDOH, w/enc.
P. J. Bembia, NYSERDA, AC-NYS, w/enc.
R. O. Porter, Seneca Nation of Indians, w/enc.

ZZZ:104516 - 450.4



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

January 19, 2011

Paul J. Bembia, Director
New York State Research and Development Authority
10282 Rock Springs Road
West Valley, NY 14171-9799

Subject: U.S. Department of Energy (DOE) Response to the November 23, 2010 New York State Energy Research and Development Authority (NYSERDA) Unresolved Comment on the Phase 1 Characterization Sampling and Analysis Plan (CSAP) for the West Valley Demonstration Project (WVDP)

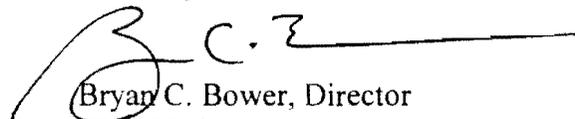
Dear Mr. Bembia:

This letter is in response to NYSERDA's letter dated November 23, 2010 and a subsequent follow-up discussion with Andrea Mellon and Paul Piciulo of your staff on December 13, 2010, regarding the adequacy of the DOE's written response to NYSERDA Comment #21 on the Phase 1 CSAP for the WVDP, dated October 21, 2010.

The remaining issue was the proposed approach for determining whether sample results were inconsistent with background assumptions during CSAP data collection (Comment #21). On the basis of NYSERDA's concerns, the methodology proposed by the CSAP will be modified to use the background 95 percent Upper Tolerance Level (UTL), as determined by reference area sampling for those radionuclides that have measurable activity concentrations in background surface soils, as the point of comparison for determining whether a sample result is inconsistent with background. In addition, text will be added to state that if false positive rates for difficult-to-measure radionuclides such as Pu-239 prove unacceptable as CSAP field work progresses using this revised methodology, this decision may be revisited.

Please let us know if NYSERDA needs any additional information concerning this issue. 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

cc: M. N. Maloney, DOE-WVDP, AC-DOE

ZZZ:104380 - 450.4

