THE WEST VALLEY
CITIZEN TASK FORCE

VIA EMAIL ONLY

January 14, 2014

Ms. Moira Maloney
West Valley Demonstration Project
United States Department of Energy
10282 Rock Springs Road
West Valley NY 14171-9799

Mr. Lee M. Gordon
West Valley Site Management Program
NYSERDA
10282 Rock Springs Road
West Valley NY 14171-9799

RE: Recommendations for Phase 1 Exhumation Studies

Dear Moira and Lee,

The West Valley Citizen Task Force is pleased to submit the following feedback on the above referenced study recommendations released by the Exhumation Working Group (EXWG) in November 2013.

The EXWG recommends three studies as a first step toward addressing the seven exhumation questions posed by DOE and NYSERDA. The three proposed studies appear generally useful but are too narrowly framed to generate the level of information needed as a first step. We recommend that the three studies be expanded or modified as follows:

1. The waste inventory analysis of Study 1 needs to engage in a more comprehensive analysis or "meta-analysis" of existing waste characterizations. For example, it is not sufficient for Study 1 to rely only on the most recent SDA and NDA characterizations and to update those most recent results "as appropriate." Several independent characterizations of both the SDA and the NDA have been conducted and published in the past for DOE and/or NYSERDA by well-qualified experts (as identified in Vaughan DEIS comments 110-112). Results of these past characterizations, which tend to differ substantially from the most recent results due to different methodologies and expert judgments, need to be combined in Study 1 in order to generate best current representations of the SDA and NDA waste inventories and the uncertainties therein. Equal weight should be given to each of the approximately four SDA characterizations, and likewise to each of the approximately four NDA analyses, unless the EXWG can provide compelling evidence for assigning lesser weights to some of the previous inventories. Each of the resulting "meta-analyses" can then be updated "as appropriate" as new information is obtained.

2. In Study 2 (evaluation of methods to address inventory uncertainty), the first of the three approaches should include the application of statistical techniques to the results of the approximately four SDA characterizations, and the approximately four NDA analyses, mentioned above. In simplest terms, an

average and standard deviation could be readily calculated for each set of four results, but more sophisticated statistical techniques might also be applied to these data sets. The second and third proposed approaches in Study 2 (evaluation of existing radiation and geophysical studies, and evaluation of new intrusive and non-intrusive techniques that could reduce uncertainty) are good; we recognize their value.

3. Study 3 (review of precedent projects) is too narrow, in our view. This study should also assess not only precedent projects but also technologies that can be applied or adapted for waste exhumation. One such technology (miniature tunnel boring machine) has already been suggested by one of the CTF members and should be evaluated. Another such technology might be a "one-pass" trencher, roughly similar to the machine used onsite for the Permeable Treatment Wall (PTW) but enclosed in its own tent-like enclosure (containment structure) which moves along with the trencher and prevents the release of contamination. If such a trencher were applied to the SDA, it would need to make multiple parallel passes to excavate and backfill the entire SDA (the waste volume being roughly 2 orders of magnitude greater than the volume excavated for the PTW). Such technologies have pros and cons but deserve attention in the near future; they should not be deferred until after a first round of studies is completed.

Thank you for this opportunity to comment.

The West Valley Citizen Task Force