THE WEST VALLEY CITIZEN TASK FORCE

To: Rebecca Tadesse, Chief
Materials Decommissioning Branch, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs

From: The West Valley Citizen Task Force

Date: March 25, 2009

RE: **West Valley Demonstration Project Phase 1 Decommissioning Plan**

Thank you for this opportunity to comment on the West Valley Demonstration Project Phase 1 Decommissioning Plan. We expect that you will address these comments in the Commission's Request for Additional Information.

1. The Phase 1 Decommissioning Plan (DP), if properly labeled as an interim plan, may serve a useful purpose as guidance that will allow Phase 1 work to move forward at the West Valley site. However, the interim purpose of the Phase 1 DP will end, and will be superseded, when a Phase 2 DP is issued in the future for Phase 2 decommissioning. A Phase 2 DP will be needed.

2. The Phase 1 DP should state clearly that it is only an interim part of the decommissioning plan that will be needed for the site. Another, more comprehensive DP must be submitted in the future before NRC and the public can determine whether the combined parts of the DP meet the decommissioning requirements prescribed by NRC under the West Valley Demonstration Project Act and set forth in NRC's License Termination Rule.

3. The Phase 1 DP is ambiguous about whether it is the only DP that the Department of Energy (DOE) intends to submit for its decommissioning activities at the West Valley site. The Executive Summary of the DP, pages ES-1 and ES-2, refers to one plan that will have two decommissioning phases, with each phase having its own "approach." However, the Executive Summary fails to state that an additional DP will be needed for Phase 2. This omission must be corrected. Page ES-2 of the Executive Summary acknowledges that "[t]his plan does not address" the Phase 2 decommissioning work but does not explicitly acknowledge that a Phase 2 DP will be needed.

4. The main text of the Phase 1 DP likewise fails to state that DOE intends to submit another DP beyond this one. Section 1.13, Control of Changes, implies that no additional DP would be submitted for Phase 2. As stated in Section 1.13 on page 1-24, "DOE plans to treat this plan as a 'living document,' revising it when circumstances warrant." Such an approach is unacceptable. Such an approach would inappropriately allow the Phase 1 DP to evolve into a Phase 2 DP without the necessary review. See, for example, 10 CFR 20.1405, Public notification and public participation, which has specific requirements that must be met whenever NRC receives a decommissioning plan. The purpose of 10 CFR 20.1405 would be defeated if DOE could submit only an interim Phase 1 DP which would be gradually revised but never formally resubmitted as a Phase 2 DP. Meaningful public comment would be impossible if the

only formal opportunity for comment occurred now, and was restricted to the Phase 1 DP, at a time when no information has been provided on decommissioning of the tanks and other major parts of the site. Granted, DOE proposes on page 1-24 to engage in a review and comment process with NRC as the decommissioning plan is gradually revised, but such a review and comment process is no substitute for the broader review and comment to which the public, state and local governments, and Indian nations are entitled under 10 CFR 20.1405. NRC must resolve this problem by requiring DOE to submit a Phase 2 DP.

5. Given the fact that the Phase 1 DP is only an interim part of a decommissioning plan, it cannot yet be determined whether the combined Phase 1 and Phase 2 DPs will ultimately meet the requirements for unrestricted site release as opposed to restricted site release.

6. In the event that the combined Phase 1 and Phase 2 Decommissioning Plans ultimately submitted by DOE do not meet the requirements for unrestricted release, the current Phase 1 DP will immediately become deficient because it fails some of the decommissioning requirements (e.g., public consultation) set forth by NRC for restricted site release. See 10 CFR 20.1403(d) and the CTF letter dated November 19, 2008. The Phase 1 DP should not take such an unconservative approach which, depending on future decisions, would curtail a crucial type of public consultation required by NRC.

7. Even within the context of the Phase 1 DP itself, it is not clear whether the Phase 1 activities will meet the requirements for unrestricted site release. DOE claims in the Phase 1 DP that such requirements will be met, but the claim is highly dependent on assumptions made by DOE. If these assumptions are not valid (e.g., if erosion modeling methods and modeling assumptions are invalid or unreliable), then DOE's exposure scenarios and derived concentration guideline levels (DCGLs) may underpredict exposures and the Phase 1 activities may fail to meet requirements for unrestricted release of the site. Given this very real possibility, the Phase 1 DP should conservatively provide the safeguards such as public consultation that are required by the NRC Final Policy Statement for West Valley, and under 10 CFR 20.1403(d), for restricted site release. We feel strongly that public input is absolutely necessary for a decision of this magnitude.

8. A disclaimer on the cover of the Phase 1 DP states that the decommissioning approach is based on the preferred alternative and that the DP "will be revised as necessary" to reflect any changes in the event that the preferred alternative is not selected in the current Environmental Impact Statement (EIS) process. The DP should *not* be "revised as necessary" under those circumstances; it should be revised and resubmitted. As currently written, the DP cannot support the selection of other EIS alternatives such as in-place closure of wastes and facilities. Analyses in the DP are inadequate in several areas, including the assessment of long-term erosion and certain non-radiological impacts, as noted below.

9. One problem with the methodology in the Phase 1 DP is its reliance on deterministic rather than probabilistic risk assessment. Probabilistic risk assessment offers well-known advantages at complex sites, as NRC itself recognizes. See, for example, 60 Federal Register 42622-29. By using deterministic risk assessment and by creating a maze of claims that its underlying assumptions for the West Valley site are "conservative," DOE makes it difficult to assess the plausibility or conservatism of its conclusions. DOE's "sensitivity analyses" rarely offer a meaningful understanding of the full range of crucial assumptions. Probabilistic risk assessment methods are intended to create a more transparent and neutral framework for calculations and assumptions. Such methods should be required in the DP for

this complex site.

10. Analyses in the Phase 1 DP are deficient in several areas such as the assessment of long-term erosion at the West Valley site. Since long-term erosion is a well known threat to site integrity (for example, see erosional collapse scenarios in the 1996 Draft EIS), this is a serious deficiency. A good illustration of this deficiency is the lack of any resolution of the issue of gully headcut (headward) advance rates. As acknowledged in Table 3-13 on page 3-51 of the Phase 1 DP, gully headcut advance rates of 0.4 to 0.7 meters/year have been measured at the site. The same page of the DP acknowledges that "More than 20 major and moderate-sized gullies have been identified near the WVDP [West Valley Demonstration Project]" and that "The initiation and growth of gullies may be the most rapid means for eroding the north and south plateaus" where the waste tanks and burial grounds are located. Despite these acknowledgments, the Phase 1 DP fails to consider the consequences of gully initiation and growth with respect to breaching of waste containment. Page 5-14 provides several disconnected statements and bullet points about gully processes with no coherent resolution of the issue. Page 5-13 of the DP cites "[d]etailed erosion studies" based on landscape evolution models presented in the Draft EIS, but those studies and models suffer from the same deficiency (a failure to address or resolve the well-known gully problem), as will be pointed out in our forthcoming comments on the Draft EIS. Over and above this specific problem with gully formation, the CTF recognizes a lack of consensus in the scientific community on the reliability of long-term erosion modeling.

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