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ON BEHALF OF THE WEST VALLEY CITIZEN TASK FORCE
December 11, 2006

We, the West Valley Citizen Task Force (CTF), thank you for this opportunity to review the decommissioning status of the West Valley site. As you know, the site is a complex site with multiple jurisdictions, encompassing a former reprocessing plant, underground waste tanks that contain residual high-level waste, two old burial grounds, and various ancillary facilities. Decommissioning has not yet formally started and cannot do so until the decommissioning Environmental Impact Statement (EIS) and Record of Decision (ROD) are issued. This process is unfortunately stalled due to serious disagreements between the U.S. Department of Energy (DOE) and New York State Energy Research and Development Authority (NYSERDA).

As you know, the U.S. Nuclear Regulatory Commission (NRC) has a dual role in the West Valley decommissioning process, involving both the completion of DOE's activities under the West Valley Demonstration Project Act and NYSERDA's subsequent termination or conversion of its Part 50 license for the site. NYSERDA will deal with NRC as a licensee under the License Termination Rule (LTR). DOE's relationship is governed by the terms of the West Valley Demonstration Project Act, including the part of that Act that requires DOE to decontaminate and decommission certain facilities in accordance with requirements set by NRC. These requirements, based generally on the LTR, have been published by NRC in its West Valley Final Policy Statement (67 Fed. Reg. 5003, February 1, 2002).

The CTF commends NRC for its attention to the West Valley site and for some of the specific steps taken by NRC. At the same time, we urge NRC to consider or reconsider certain steps that will be needed for safe closure of the site.

Most of the site, including the major facilities that dominate the decommissioning decisions, sits on erodible glacial fill (not on bedrock) in an area being downcut by steep-gradient streams that flow to the Great Lakes. Deep ravines, ranging up to 80' deep within a few hundred feet of the main facilities and up to 160' within a fraction of a mile, illustrate the long-term erosion threat to site integrity. Studies have confirmed this threat, the only question being when, not whether, waste containment would be lost to uncontrolled erosion. The answer, depending on the study, ranges from hundreds to thousands of years based on historical precipitation. Extreme precipitation events associated with climate change are likely to accelerate the erosion.

Given the site's unusual susceptibility to failure due to uncontrolled erosion, given the quantities of long-lived radionuclides in the onsite tanks and burial grounds, and given the general recognition by involved agencies that the site is vulnerable to erosion, *the CTF remains convinced that radioactive material at the West Valley site cannot safely be left onsite. Wastes will need to be removed from the site to protect local residents, the regional environment, and the Great Lakes.* Some involved agencies, even though they recognize that the erosion threat is real, appear willing to leave wastes onsite under marginal circumstances. The argument appears to be that recognizably serious consequences would not occur before time "x" but would occur

by approximately time "y," giving some future element of society the option of doing something between times "x" and "y." An alternative argument is that, even though recognizably serious consequences would occur at about time "y" under certain exposure scenarios, the scenarios can be "tweaked" to reduce the predicted exposures to acceptable limits. We cannot agree that either of these would be a responsible way to decommission wastes. In our interpretation, the LTR would prohibit the former, and no responsible agency would allow the latter without insisting on probabilistic risk assessments and sensitivity analyses. We hope NRC will not condone either of these arguments.

We recognize that some delay in decommissioning activities (e.g., exhumation of buried wastes) might be warranted, if it could be shown that the reduction in source term to due to near-term decay would significantly reduce worker exposure and overall risk. However, if shown to be warranted, such delayed action should be built into a decommissioning plan and schedule that would be adopted now, i.e., within the next few years. It should not be an excuse for indefinitely deferring the adoption of a decommissioning plan.

Our specific comments and concerns that relate to NRC's role in decommissioning are:

1. We do not necessarily agree with NYSERDA that NRC should establish a concurrent, rather than sequential, process under which the West Valley decommissioning activities of DOE and NYSERDA would be conducted. However, if the process is sequential, we consider it crucial that a) the decommissioning requirements be uniform for DOE and for NYSERDA, and b) the question of license continuity and/or license reestablishment be handled appropriately by NRC. The latter question is not likely to be simple, especially in view of the fact that the existing site license is "in abeyance" and lacks technical specifications. A recent NRC letter to NYSERDA indicates that "NYSERDA is subject to the LTR after NYSERDA's NRC license is reactivated" at the conclusion of the West Valley Demonstration Project (Martin Virgilio letter to Peter Smith, October 25, 2006, page 4 of Enclosure). This statement is literally true but glosses over what "reactivated" means. We doubt that NRC could create new technical specifications without an administrative process that includes public notice and comment, nor does it seem appropriate for reprocessing or burial to be authorized by reinstating old technical specifications. The question of uniform requirements for DOE and NYSERDA may also present some challenges, especially given the overarching need for those requirements to be protective against long-term unraveling of the site due to uncontrolled erosion.

2. NRC must ensure that all evaluations of erosional processes and long-term radiological impacts are carried far enough into the future to identify peak doses. As stated by NRC in its West Valley Final Policy Statement (page 5006), "information will need to be evaluated to determine if peak doses might occur after 1000 years and to define dose consequences and impacts on long-term management of residual radioactivity at the site." Such long-term evaluations are especially important for assessing proposals that would leave wastes onsite under the types of marginal circumstances outlined above, especially where differences in assumptions and exposure scenarios affect the timing and severity of peak doses. In general, NRC staff will need to look closely at underlying assumptions, including future climate, durability of assumed

barriers, and locations of dose receptors. Staff must ensure that appropriate tools (e.g., probabilistic risk assessment) are used to evaluate decommissioning plans in which changes in assumptions produce widely varying results. Where uncertainty is large, staff must require either formal analysis or an equivalently conservative approach.

3. NRC needs to maintain an appropriate distinction between decommissioning and disposal, in accordance with the West Valley Demonstration Project Act's separate requirements for decommissioning and disposal. A recent NRC letter to NYSERDA (id., page 5 of Enclosure) seems to dismiss this distinction by stating that "Residual radioactivity remaining at a licensed site is not considered low-level waste subject to Part 61...." This statement, however, does not take into account a) the prevailing authority of the West Valley Demonstration Project Act of 1980, b) the generally accepted distinction between decommissioning and near-surface disposal, either now or in 1980, and c) the absence of any explicit authorization in the LTR for licensees to construct elaborate barriers or containment vaults as a means of complying with the LTR. Compliance with the LTR is explicitly tied to "reductions" of residual radioactivity, and some credit is taken for barriers, but the construction of elaborate new containment systems would generally be construed as disposal. DOE's proposals for in-place closure of the West Valley high-level waste tanks raise this type of question.

4. NRC should not authorize or condone waste reclassification at the West Valley site – such as Waste Incidental to Reprocessing (WIR) reclassification for residual high-level waste in tanks – that is inconsistent with the West Valley Demonstration Project Act.

5. We continue to be concerned that NRC does not assert authority over the growing plume of strontium-contaminated groundwater that is daylighting to one of the onsite creeks. Part of the rationale for putting the West Valley site license into abeyance 25 years ago was that DOE had the expertise to deal with radiological issues for the duration of the West Valley Demonstration Project. However, DOE has been unwilling to deal effectively with this plume that came from a reprocessing plant (a) prior to DOE's arrival at the site. With no party asserting authority, and no effort having been made to remediate the concentrated source area when the plume was much smaller, the plume has continued to spread into additional acres of previously uncontaminated soil. It is a decommissioning issue due to the increasingly large amount of cont55.800oTrstrontiumsD(Waste Ir

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