

February 1, 2000

Jack Parrott
Office of Nuclear Material Safety and Safeguards
Mail Stop T-8F37
U.S. Nuclear Regulatory Commission
Wash., D.C. 20555-0001

RE: Draft Policy for decommissioning the West Valley nuclear waste site and the West Valley Demonstration Project (WVDP).

Dear Jack Parrott:

I am writing you on behalf of Environmental Advocates, a New York State environmental advocacy and watchdog group with thousands of supporters and over 130 organizational members. We would like to register our concern regarding the Nuclear Regulatory Commission's (NRC) proposal to apply its 1997 License Termination Rule (LTR) [2], [6] to West Valley and NRC License Rule, 10 CFR §20.1404, Alternate Criteria for License Termination. In particular, we take issue with the flexible nature of the proposed radioactive exposure levels and the NRC's deregulation of decommissioning that could lower the bar and ultimately set precedent for other decommissionings (some that share the same contamination pathway).

As we confront – at the local, state, and national levels – the problems of High Level Waste (HLW) and transuranic contamination at civilian nuclear power plants, the fate of West Valley is a matter of eminent importance. With the preponderance of HLW and transuranics at West Valley and the large geographic area of environmental impact, the decommissioning criteria for the site must be unambiguous, consistent with the letter and intention of NRC rules, and protect the public health and safety to the greatest extent possible. Therefore, Environmental Advocates (EA) believes that the 500mRem dose standard (to be considered under the loss of institutional controls scenario) is, without doubt, incapable of protecting the public health and safety, and it should not be considered under the West Valley decommissioning criteria. Therefore, EA supports the following points and feel that they must be incorporated into the final policy statement on decommissioning criteria for the site:

1) There should be no reclassification of High Level Waste (HLW) residing in underground storage tanks. The steps that have already been taken to prevent further leaking of the HLW into

the groundwater are important for minimizing the rate of leaching into soil and groundwater. However, they do not abate the make-up or radioactivity of the contaminants present. Further, the remaining waste and tanks need to be exhumed, repackaged and stored above ground. To the greatest degree possible, the risk of groundwater contamination must be mitigated, and contaminants isolated from the environment.

2) The decommissioning criteria must cover the entire West Valley site, including the State Disposal Area (SDA). The waste buried in the SDA contains many of the same kinds of contaminants as the DOE-owned portion of the site, and the siting of the SDA at West Valley was part and parcel with the operation of the reprocessing facility. The standards under which the SDA was classified as a low-level waste site are now obsolete, and it could not now be licensed as such. Further, contaminants from the site will mix through leaching and groundwater, and environmental impact of contamination from all portions of the site is inextricably related. Therefore, the entire West Valley site should be subject to unified decommissioning criteria and a holistic environmental impact analysis.

3) The term "institutional controls" must be specifically and clearly defined in the decommissioning criteria. In particular, the scenario and criteria for loss of institutional controls at the site must be detailed and unambiguous. In order to ensure protection of the public health, the loss of institutional controls scenario must include: a) continued NRC involvement and oversight after loss of institutional control, to ensure that further remediation of the site is planned and performed consistent with standards of public health and safety; and b) the role and provisions for maintenance of engineered barriers after loss of institutional control by the current licensees.

4) The timelines on dose calculations should be extended from 1,000 years to 10,000 years. Geological studies of the site estimate that erosion patterns at West Valley could lead to the most significant migration of contaminants off-site after the proposed 1,000-year timeline. The contamination pathway from West Valley is known to include Lake Ontario and eastern Lake Erie. The environmental impact of this scenario could affect a wide geographic area, including the drinking water for millions of people and several other nuclear sites -- for instance Ginna, Nine Mile Point (Units 1 and 2), and Fitzpatrick. The possible effect on Canadian nuclear sites on Lake Ontario could also make the fate of the West Valley decommissioning a matter of international relations and policy. It is relevant to the safety of downstream reactor communities that subsequent contamination of those sites by West Valley waste be limited as strictly as possible. Further, West Valley must not contribute to ambiguous definitions and calculations of "background radiation" in future decommissionings of downstream sites, as has happened around the issue of nuclear bomb test fallout. The only way to adequately ensure against these problems is for the standards and planning for decommissioning at West Valley to be rigorous and forward-looking, and to use the most conservative timeline in the dose calculation criteria.

5) There are specific matters related to decommissioning plans at West Valley that should be incorporated as a matter of policy for the site: a) All waste must be exhumed and stored above ground so that it is isolated from the environment and accessible to be repackaged in the case of container failure; and b) The decommissioning plans must not incorporate use of the new process titled "rubblization," for while it may reduce surface-level dose measurements, it ensures no barriers to the problems of erosion and groundwater contamination. The latter point is especially important given the high level of transuranic contamination of the reprocessing facility building. However, the use of rubblization precludes any possibility of the site being released for unrestricted use, and would constitute avoidance of responsibility for cleanup, rather than cleanup per se.

6) We have reviewed and support the comments by Coalition on West Valley Nuclear Wastes (December 17, 1999) on NRC License Rule, 10 CFR §20.1404, Alternate Criteria for License Termination. We would add that the stipulation on application of alternate criteria is actually narrower than cited in CWVNW's comments: "... the Commission may terminate a license using alternate criteria ... if the licensee provides assurance that public health and safety would continue to be protected, and that it was unlikely that the radiation dose from all potential man-made sources combined would be more than 100 millirems per year." In any consideration of alternate criteria, the dose standard for cleanup may still never exceed 100mRem/year. Further, with NRC estimates of standard exposures from such sources as medical examinations (50 mRem/yr) and airline travel (5mRem/flight), it is unlikely that a licensee could reasonably justify remediating the site to greater than 25mRem, much less as high as 100mRem. It should also be noted that alternate criteria cannot, therefore, be used to allow the 500 mRem/yr dose standard for site cleanup.

Sincerely,

Kyle Rabin
Environmental Advocates

cc: Greta J. Dicus, Chairman, U.S. NRC
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Subject: Written comments on NRC West Valley LTR

CC: "gjd@nrc.gov" <gjd@nrc.gov>