

June 15, 2004

Raymond C. Vaughan  
Coalition on West Valley Nuclear Wastes  
135 East Main Street  
Hamburg, NY 14075

Dear Mr. Vaughan:

I am responding to your March 28, 2004, letter to James Lieberman regarding several comments raised in conjunction with the U.S. Nuclear Regulatory Commission's (NRC) March 23, 2004, meeting on the U.S. Department of Energy's (DOE) West Valley Demonstration Project Decommissioning Plan. Mr. Lieberman recently retired from the agency. Enclosed are specific responses to your comments.

NRC looks forward to working with the Coalition on West Valley Nuclear Wastes and other stakeholders in addressing issues related to the decommissioning of the West Valley site. Should you have any questions on this matter, please contact Daniel Gillen, of my staff, at (301) 415-7295.

Sincerely,

**/RA/**

John T. Greeves, Director  
Division of Waste Management  
and Environmental Protection  
Office of Nuclear Material Safety  
and Safeguards

Enclosure:

Response to the Coalition on W. Valley Nuclear Wastes Comments Related to the Decomm.  
of the W. Valley Site

cc: R. Armstrong, Seneca Nation of Indians  
P. Giardina, US EPA  
T. Jackson, US DOE  
P. Piciulo, NYSERDA  
A. Salame-Alfie, NYSDOH  
B. Youngberg, NYSDEC  
West Valley Citizen Task Force

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\*See Previous Concurrence

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## **Response to the Coalition on West Valley Nuclear Wastes Comments Related to the Decommissioning of the West Valley Site**

### **1. Comment - Disposal**

The West Valley Demonstration Project Act (WVDPA) Section 2(a)(4), requires that DOE “shall, in accordance with applicable licensing requirements, dispose of low level radioactive waste and transuranic waste produced by the solidification of the high level radioactive waste under the project.” In prescribing decommissioning requirements under Section 2(a)(5), NRC cannot diminish DOE’s obligation to comply with Section 2(a)(4) for activities that involve disposal of low-level and transuranic wastes. Disposal of these types of wastes must be done “in accordance with applicable licensing requirements.” The licensing requirements that are widely recognized as being “applicable” to low-level waste (LLW) disposal are 10 CFR 61 and 6 NYCRR 382. Any disposal of LLW resulting from the Demonstration Project must therefore be governed by one of these sets of requirements unless other licensing requirements can be shown to be “applicable.” No convincing argument can be made that “no licensing requirements are applicable.” DOE’s traditional claims of non-licensed status cannot be used to justify unlicensed disposal by DOE on a site that it does not own and does not intend to occupy or maintain. I believe you indicated during the March 23 meeting that some portion of 10 CFR 20 might be interpreted as “applicable licensing requirements” for disposal of LLW in conjunction with decommissioning. Since I have not been able to find any language in Part 20 to support this idea, I would appreciate a more complete description, including an explanation of how all three words of the phrase “applicable licensing requirements” would be satisfied.

### **Response:**

In prescribing the decommissioning requirements under Section 2(a)(5), the U.S. Nuclear Regulatory Commission (NRC) did not relieve the U.S. Department of Energy (DOE) of its separate obligation to comply with Section 2(a)(4) for activities that involve disposal of low-level waste and transuranic waste. The NRC staff agrees that disposal of these wastes must be done “in accordance with applicable licensing requirements” for the particular disposal site.

Low-level waste removed from the West Valley site for disposal must meet 10 CFR Part 61 if disposed of at an NRC-licensed site, or the equivalent Agreement State regulation if disposed of at an Agreement State-licensed site. If the material is being disposed of at a DOE-owned site, there are no applicable NRC licensing requirements but DOE Orders would govern the disposal.

Residual radioactivity remaining at the NRC-licensed portion of the West Valley site is not considered low-level waste subject to 10 CFR Part 61. The applicable requirements for residual radioactive material remaining at this site are contained in the License Termination Rule (LTR) (10 CFR Part 20, Subpart E). Residual radioactivity remaining at a site that meets the LTR is not subject to further NRC regulation.

ENCLOSURE

## 2. Comment - Prior Onsite Burials

Given the definitions of “residual radioactivity” and “site boundary” in 10 CFR 20.1003, New York State Energy Research and Development Authority (NYSERDA) will need to include the State-licensed disposal area (SDA) in its dose calculations for the LTR. I see no way to avoid this conclusion, as residual radioactivity includes radioactivity from both licensed and unlicensed sources, includes previous burials at the site, and relies on a definition of “site boundary” that encompasses all the land that is owned, leased, or otherwise controlled by the licensee. This clearly ties NYSEDA (but not necessarily DOE) to prior burials in the SDA. Thus, part of the LTR compliance process may not be “government neutral.”

### Response:

For the reasons explained below, NRC staff does not agree that NYSEDA will need to include the SDA in its dose calculations for the LTR due to the definitions of “residual radioactivity” and “site boundary.” However, the dose contribution from the SDA will need to be considered in the Decommissioning Environmental Impact Statement (EIS) so that there is a full understanding of the impacts at the site from the remaining radioactivity.

The term “site boundary” is defined in 10 CFR 20.1003 as “that line beyond which the land or property is not owned, leased, or otherwise controlled by the licensee.” We understand your comment to be that because NYSEDA owns, leases, or otherwise controls the SDA which is adjacent to the NRC-licensed site, the SDA must lie within the site boundary and therefore residual radioactivity - which includes all licensed and unlicensed sources used by the licensee, including previous burials at the site - within this broadly-defined site must be included in the dose calculations for the LTR. The Commission recently considered the question whether licensee-owned contiguous areas to the NRC-licensed site, which were not used for licensed activities, must be considered to be within the site boundary as defined in 20.1003 in a final rule, *Releasing Part of a Power Reactor Site or Facility for Unrestricted Use Before the NRC Approves the License Termination Plan*, 68 FR 19711 (April 22, 2003) (“Partial Release Rule”).<sup>1</sup> The Commission determined (68 FR 19714) that “[s]ite boundary,’ as defined in 10 CFR 20.1003 is not the area to be considered in demonstrating compliance with the radiological release criteria for all licensees.” Rather, for the purpose of partial site release, the focus is to be “the current and historic licensed site, meaning the site area as described in the original NRC license application, plus any acquisition of property outside the originally licensed site boundary added for the purpose of receiving, possessing, or using licensed material at any time during the term of the license.”

The NRC staff explained this conclusion in recommending the final Partial Release Rule (SECY-02-0221) to the Commission:

[T]he staff has concluded that the broader definition is not the appropriate area to be considered with respect to the release criteria for a number of reasons. First, ... the terms ‘site’ and ‘site boundary’ are used in a number of contexts by licensees and in the

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<sup>1</sup>See also SECY-02-0221: Final Rule to Standardize the Process for Allowing a Licensee to Release Part of its Reactor Facility or Site for Unrestricted Use Before NRC Has Approved Its License Termination Plan (December 20, 2002), pp. 4-5 [ADAMS ML023310021].

Commission's regulations. However, the definition of 'site boundary' was incorporated into 10 CFR Part 20 not to describe the area subject to the release criteria, but to support the concept of a controlled area. The sole use of the term in Part 20 is in the definition of a controlled area. There seems to have been no intent to use the term 'site boundary,' which does not appear in 10 CFR Part 20, Subpart E, to redefine the boundaries of all sites. To apply the definition in § 20.1003 to the LTR could result in an overly broad definition of 'sites.' Such a definition would include areas owned or leased by licensees even if the property had no nexus to licensed activities and would be an unreasonable interpretation of the term.

Although NYSERDA will not need to include the SDA in its dose calculations for compliance with the LTR, the Decommissioning EIS will need to consider the number of sources to which the critical group may be exposed, including the dose from the SDA. NRC is participating as a cooperating agency with other Federal and State agencies in the development of this EIS and, in this context, the NRC staff will assess the dose contribution of the SDA in considering the site impacts.

### **3. Comment - Partial Site Release**

NRC's Final Policy Statement notwithstanding, DOE does not have the option of partial site release. DOE's mandate under Section 2(a)(5) of the WVDPA is to "decommission" the tanks, certain other facilities, etc. DOE's obligation to decommission cannot be diminished by any suggestions that NRC might make about partial site release. NYSERDA may also lack any meaningful option of partial site release, since partial site release normally depends on keeping an existing license in force for part of the site in question. The fact that NYSERDA's license is currently in abeyance would prevent any automatic reliance on partial site release. To achieve any sort of partial site release, NYSERDA would need to create or acquire a license (or possibly just its technical specifications if the license remains a Part 50 license) at the same time that NYSERDA is attempting to meet the LTR. This would be an unusual occurrence, and would not be a routine instance of partial site release.

#### **Response:**

The NRC staff agrees that DOE is not directly involved in any licensing decision related to partial site release of the NRC-licensed site. Since DOE is not the licensee or owner of the site, any licensing action to release part of the site would need to be proposed by NYSERDA and approved by NRC as a license amendment. The Commission's Policy Statement contemplates that after DOE completes its decontamination and decommissioning responsibilities under Section 2(a)(5) of the WVDPA and the project area is returned to NYSERDA, NYSERDA could initiate license termination for all or portions of the site. Although NYSERDA's license is still in effect, the license conditions for the operation and maintenance of the facility are effectively suspended or in abeyance while DOE is in possession of the facility. Therefore, NRC does not envision any licensing action related to partial site release until DOE completes its decommissioning responsibilities under the WVDPA and the Project area is returned to NYSERDA.

#### **4. Comment - Exemptions**

As you know, any exemptions that DOE may seek from the LTR are 1) likely to be contested on the grounds that they would weaken the protection intended by the LTR and 2) are likely to be exemptions from subsection 20.1403(e) which sets a dose cap of 100 or 500 mrem that cannot be exceeded "if the institutional controls were no longer in effect." As discussed briefly on March 23, one of our longstanding concerns is that NRC lacks National Environmental Policy Act (NEPA) coverage for granting any exemption from subsection 20.1403(e). This subsection provides quantitative protection against a future possibility (loss of institutional controls) that cannot be precisely quantified but was analyzed in detail in the Generic Environmental Impact Statement for the LTR. Dropping the protection of 20.1403(e) - which is what any West Valley exemption is likely to consist of - cannot be done without new NEPA coverage. It is specious to argue, as NRC has done in the past, that the West Valley Decommissioning EIS now being prepared by DOE and NYSERDA could support an NRC decision to drop the protection of Section 20.1403(e). The proposed actions are interrelated but not the same; the decisionmakers are different; and the sequence of steps required by NEPA has not been met by NRC.

#### **Response:**

DOE may request an exemption from the LTR provisions in 10 CFR Part 20 for portions of the site covered by the WVDPA that cannot meet the restricted release provisions of the LTR. The Commission will consider granting an exemption to the LTR if compliance with the LTR's restricted release requirements is technically impractical or prohibitively expensive provided that protection of public health and safety and the environment can be maintained. The Commission's Policy Statement states (67FR5011) "... it is NRC's intent to authorize that any exemptions or alternate criteria authorized for DOE to meet the provisions of the WVDP Act will also apply to NYSERDA at the time of site license termination, if license termination is possible. The NRC site license termination is not addressed in the WVDP Act. Therefore the NRC site license termination is subject to the provisions of the Atomic Energy Act of 1954 as amended." If NYSERDA pursues either full or partial license termination of the NRC license, NRC will need to conduct an environmental review to determine if an EIS is necessary to support license termination. As indicated in response to the previous comment, NRC does not envision any licensing action related to either full or partial license termination until DOE completes its responsibilities under WVDPA and the Project area is returned to NYSERDA.

The NRC staff believes NEPA coverage will be provided if DOE seeks an exemption from the dose caps in 20.1403(e) as part of the Decommissioning EIS because the impacts of the exemption would be addressed and evaluated in the Decommissioning EIS. The NRC has agreed to provide support to DOE and NYSERDA in the preparation of the Decommissioning EIS as a cooperating agency. The NRC could adopt the Decommissioning EIS, or a portion of it, if NRC found it acceptable. If NRC needs to supplement the EIS, it will do so.