

U.S. Nuclear Regulatory Commission
Decommissioning Criteria for the West Valley Demonstration Project (M-32)
and West Valley Site; Draft Policy Statement and
Notice of Public Meeting

AGENCY: Nuclear Regulatory Commission.

ACTION: Draft Policy Statement and Notice of Public Meeting.

SUMMARY: By memorandum from the Secretary of the Commission to the staff, dated June 3, 1999, the Commission approved the application of the U.S. Nuclear Regulatory Commission's (NRC's) License Termination Rule (LTR), as the decommissioning criteria for the West Valley Demonstration Project and the West Valley site. NRC is issuing this draft policy statement on the decommissioning criteria for public comment. It also is issuing a notice of public meeting to solicit public comment on the draft.

DATES: Comments on this draft policy statement should be submitted by [insert date 60 days from the date of publication in the Federal Register]. Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

ADDRESSES: Submit written comments to: Jack D. Parrott, Project Scientist, Office of Nuclear Material Safety and Safeguards, Mail Stop T-8F37, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Hand-deliver comments to: 11555 Rockville Pike, Rockville, Maryland, between 7:30 a.m. and 4:15 p.m., Federal workdays. Copies of comments received may be examined at the NRC Public Document Room, 2120 L Street, NW (Lower Level), Washington, DC.

FOR FURTHER INFORMATION CONTACT: Jack D. Parrott, Project Scientist, Office of Nuclear Material Safety and Safeguards, Mail Stop T-8F37, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001; telephone 301-415-6700; e-mail: jdp1@nrc.gov.

SUPPLEMENTARY INFORMATION:

Background

From 1966 to 1972, under an Atomic Energy Commission (AEC) license, Nuclear Fuel Services (NFS) reprocessed 640 metric tons of spent fuel at its West Valley, New York, facility-- the only commercial spent fuel reprocessing plant in the U.S. The facility shut down in 1972 for modifications to increase its seismic stability and to expand capacity. In 1976, without restarting the operation, NFS withdrew from the reprocessing business and returned control of the facilities to the site owner, the New York State Energy Research and Development Authority (NYSERDA). The reprocessing activities resulted in 2,300,000 liters (600,000 gallons) of liquid high-level radioactive waste (HLW), stored below ground in HLW tanks, and other radioactive wastes and residual radioactive contamination.

The West Valley site was licensed by AEC, and then NRC, until 1981, when the license was suspended to execute the 1980 West Valley Demonstration Project (WVDP) Act, PL. 96-368. The WVDP Act authorized the U. S. Department of Energy (DOE), in cooperation with NYSERDA, the owner of the site and the holder of the suspended NRC license, to: (1) carry out a liquid-HLW management demonstration project; (2) solidify, transport, and dispose of the HLW at the site; (3) dispose of low-level waste (LLW) and transuranic waste produced by the WVDP, in accordance with applicable licensing requirements; and (4) decontaminate and decommission facilities used for the WVDP, in accordance with requirements prescribed by

NRC. NYSERDA is responsible for all site facilities and areas outside the scope of the WVDP Act. Although NRC suspended the license covering the site until completion of the WVDP, NRC has certain responsibilities, under the WVDP Act, that include prescribing decontamination and decommissioning criteria.

The WVDP is currently removing liquid HLW from underground HLW tanks at the site, vitrifying it, and storing it onsite for eventual offsite disposal in the Federal repository. The vitrification operations are nearing completion. In addition to the vitrified HLW, the WVDP operations have also produced large quantities of LLW and transuranic waste which, under the Act, must be disposed of in accordance with applicable licensing requirements. Besides the HLW at the site, the historical spent fuel reprocessing and waste disposal operations resulted in large quantities of a full range of buried radioactive wastes and structural and environmental contamination at the site.

In 1989, DOE and NYSERDA began to develop a joint Environmental Impact Statement (EIS) for project completion and site closure, and to evaluate waste disposal and decommissioning alternatives. Because the WVDP Act requires NRC to prescribe decommissioning criteria for the project, NRC and DOE agreed on NRC's participation as a cooperating agency on the EIS, with DOE and NYSERDA, to aid NRC in its decision on decommissioning requirements. The draft EIS was published in 1996.

After public review of the draft EIS, the WVDP convened the West Valley Citizen Task Force (CTF) in early 1997 to obtain stakeholder input on the EIS. The CTF recommendations for the preferred alternative in the EIS were completed in July 1998. The CTF generally does not believe the West Valley site is suitable for long-term isolation of waste and, therefore, favors disposal of the waste offsite at suitable and safe disposal facilities. In the latter half of 1997 (during the period that the CTF was working on their recommendations), the NRC's LTR was published (62 FR 39058; July 21, 1997).

Because NRC is authorized to prescribe decommissioning criteria for the WVDP by the WVDP Act, the NRC staff proposed decommissioning criteria for West Valley to the Commission in a Commission Paper entitled "Decommissioning Criteria for West Valley" dated October 30, 1998 (SECY-98-251). The Commission requested a public meeting on SECY-98-251 to obtain input from interested parties. Based on the results from this meeting, which was held January 12, 1999, the Commission issued a Staff Requirements Memorandum (SRM) on January 26, 1999, requesting additional information on the staff's proposed decommissioning criteria for West Valley. In response to the January 26, 1999, SRM the staff provided SECY-99-057, to the Commission, entitled "Supplement to SECY-98-251, 'Decommissioning Criteria for West Valley.'" Based on the contents of SECY-98-251, SECY-99-057, and written and oral comments from interested parties, the Commission issued an SRM on June 3, 1999, detailing its decisions on the decommissioning criteria for West Valley. This draft policy statement is based on the contents of that SRM.

Statement of Policy

Decommissioning Criteria for the WVDP

Under the authority of the WVDP Act the Commission is prescribing NRC's LTR as the decontamination and decommissioning criteria for the WVDP. These criteria shall apply to the decontamination and decommissioning of: (1) the HLW tanks and other facilities in which HLW, solidified under the project, was stored; (2) the facilities used in the solidification of the waste; and (3) any material and hardware used in connection with the WVDP. The LTR does not apply a single public dose criterion.

Rather, it provides for a range of criteria. For unrestricted release, the LTR specifies a dose criterion of 25 millirem (mrem)/year to the average member of the critical group plus as low as reasonably achievable (ALARA) considerations (10 CFR 20.1402). For restricted

release, the LTR specifies an individual dose criterion of 25 mrem/year plus ALARA considerations utilizing legally enforceable institutional controls established after a public participatory process (10 CFR 20.1403). Even if institutional controls fail, individual doses should generally not exceed 100 mrem/year. If it is demonstrated that the general 100 mrem/year criterion in the event of failure of institutional controls is technically unachievable or prohibitively expensive, the individual dose criterion in the event of failure of institutional controls may be as high as 500 mrem/year. However, in this circumstance this site would be rechecked by a responsible government entity no less frequently than every five years and resources would have to be set aside to provide for any necessary control and maintenance of the institutional controls. Finally, the LTR permits alternate individual dose criteria of up to 100 mrem/year plus ALARA considerations for restricted release with institutional controls established after a public participatory process (10 CFR 20.1404). Use of alternate criteria must be approved by the Commission itself after coordination with the Environmental Protection Agency and after consideration of the NRC staff's recommendations and all public comments. The Commission's application of the LTR to the WVDP is a two-step process: 1) the NRC is now prescribing the application of the LTR; and 2) following the completion of DOE/NYSERDA's Environmental Impact Statement (EIS) and selection of its preferred alternative, the NRC will verify that the specific criteria identified by DOE is within the LTR and will prescribe the use of this specific criteria for the WVDP.

Decommissioning Criteria for the NDA and SDA

NRC will apply the criteria in the LTR to the NRC-licensed radioactive waste disposal area (NDA) within the WVDP site boundary since the NDA is under NRC jurisdiction. NRC will not apply the criteria in the LTR to the State-licensed radioactive waste disposal area (SDA) adjacent to the WVDP site boundary since the SDA is not under NRC jurisdiction.

Decommissioning Criteria for License CSF-1

The criteria in the LTR will also apply to the termination of NYSERDA's NRC license on the West Valley site once that license is reactivated.

Policy Implications

The policy of applying NRC's existing LTR to the decommissioning of the WVDP and West Valley site is consistent with the decommissioning requirements for all NRC licensees. Therefore, no policy implications are foreseen with the application of the LTR to the decommissioning of the WVDP and West Valley site.

Environmental Analysis

The environmental impact of applying the LTR to NRC licensees was evaluated in a Generic Environmental Impact Statement (GEIS, NUREG-1496) that supports the LTR. When the particular criteria permitted by the LTR are selected, the environmental impacts from the application of the criteria will be considered. The NRC intends to rely on the DOE/NYSERDA's EIS for this purpose. The DOE is considered for NEPA purposes as the lead federal agency. DOE is developing a decommissioning plan and is responsible for its preparation and implementation. The NRC, in view of its responsibilities under the WVDP Act, is considered a cooperating agency for this EIS and is participating in the development of the DOE/NYSERDA EIS. The NRC does not anticipate the need to prepare its own duplicative EIS as the NRC can consider the environmental impacts described in the DOE/NYSERDA EIS in approving the particular decommissioning criteria for the WVDP under the LTR. Under this arrangement, the DOE/NYSERDA EIS will fulfil the NEPA responsibilities for the NRC.

Availability of Documents

The NRC's draft policy statement on decommissioning criteria for West Valley is also available at NRC's Public Electronic Reading Room link (<http://www.nrc.gov/NRC/ADAMS/index.html>) on the NRC's home page (<http://www.nrc.gov>). Copies of documents cited in this section are available for inspection and/or reproduction for a fee in the NRC Public Document Room, 2120 L Street, NW (Lower Level), Washington, DC 20003. The NRC Public Document Room is open from 7:45 a.m. to 4:15 p.m., Monday through Friday, except on Federal holidays. Reference service and access to documents may also be requested by telephone (202-634-3273 or 800-397-4209), between 8:30 a.m. and 4:15 p.m.; or by e-mail (PDR@nrc.gov); fax (202-634-3343); or a letter (NRC Public Document Room, LL-6, Washington, DC 20555-0001). In addition, copies of: (1) SECY-98-251, "Decommissioning Criteria for West Valley"; (2) the transcript of the public meeting held January 12, 1999; (3) the Commission's SRM of January 26, 1999, concerning the January 12, 1999, public meeting on SECY-98-251; (4) SECY-99-057, "Supplement to SECY-98-251, 'Decommissioning Criteria for West Valley'"; (5) the Commission's vote sheets on SECY-98-251 and SECY-99-057; and (6) the Commission's SRM of June 3, 1999, on SECY-98-251 and SECY-99-057, can be obtained electronically on NRC's home page at the Commission's Activities link (<http://www.nrc.gov/NRC/COMMISSION/activities.html>).

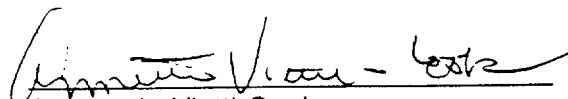
Public Meeting

NRC will conduct a public meeting at the Ashford Office Complex, 9030 Route 219, West Valley, New York, conference room C1, on January 5, 2000, to discuss the draft policy statement for the decommissioning criteria for West Valley with interested members of the public. The meeting is scheduled for 7:00-9:00 p.m., and will be facilitated by Francis X.

Cameron, Special Counsel for Public Liaison, NRC. There will be an opportunity for members of the public to ask questions of NRC staff and make comments related to the West Valley decommissioning criteria. The meeting will be transcribed. For more information on the public meeting, please contact Jack D. Parrott, Project Scientist, Office of Nuclear Material Safety and Safeguards, Mail Stop T-8F37, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; 301-415-6700; e-mail: jdp1@nrc.gov.

Dated at Rockville, Maryland, this 29th day of November, 1999.

For the Nuclear Regulatory Commission,


Annette L. Vietti-Cook,
Secretary of the Commission.