

**U.S. Nuclear Regulatory Commission
Implementation Plan for the Final Policy Statement on
Decommissioning Criteria for the West Valley Demonstration Project
at the West Valley Site**

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Division of Waste Management
Office of Nuclear Materials Safety and Safeguards**

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1.0 Introduction

On February 1, 2002, the U.S. Nuclear Regulatory Commission (NRC) published its Final Policy Statement on Decommissioning Criteria for the West Valley Demonstration Project (WVDP) at the West Valley site (67 FR 5003). On April 16-17, 2002, NRC held a series of public meetings at the site to discuss the Final Policy Statement and address stakeholder comments and questions. NRC is now in the process of implementing the policy statement. This Implementation Plan (IP) for the Final Policy Statement describes the decommissioning process for the WVDP and NRC-licensed site. The IP also describes the license termination process (if license termination is pursued for all or part of the site) when the license is reinstated. The IP refers to published NRC guidance documents for a detailed discussion of the decommissioning process. This IP is a living document and its contents may change as the situation at West Valley evolves¹.

2.0 Purpose

- Describe the decommissioning process under WVDP Act.
- Describe the decommissioning and license termination process under Atomic Energy Act (AEA).
- Identify NRC decommissioning and license termination decisions under WVDP Act and AEA.

3.0 Background

The Western New York Nuclear Service Center (Center) consists of a 3,345-acre reservation in rural western New York that is the location of the only NRC-licensed commercial spent nuclear fuel reprocessing facility to have operated in the United States. The New York State Energy Research and Development Authority (NYSERDA) holds title to the Center on behalf of the people of New York State. Pursuant to the WVDP Act, U.S. Department of Energy (DOE) and NYSERDA entered into a Cooperative Agreement effective October 1, 1980, that specifies the responsibilities and conditions agreed upon by each for the purpose of carrying out the WVDP Act. Since 1981, NYSERDA's NRC Part 50 license has been held in abeyance to execute the WVDP Act.

Under the agreement, NYSERDA has made available to DOE, without transfer of title, an approximately 200-acre portion of the Center, referred to as the "Project Premises." The Project Premises is divided into two geographic areas known as the North Plateau and the South Plateau. The facilities located on the North Plateau include a process building, a vitrification facility, a spent nuclear fuel receiving and storage area, liquid high-level radioactive waste (HLW) storage tanks, a liquid low-level radioactive waste (LLW) treatment facility with associated lagoons, and other minor support facilities. The facilities located on the South Plateau include a NRC-licensed radioactive waste disposal area (NDA), and a State-licensed radioactive waste disposal area (SDA). Both the NDA and the SDA are presently closed. The

¹This document does not establish legal requirements. It is intended to guide staff actions based on existing requirements. It is subject to change during the implementation process.

NDA is regulated by the NRC and the SDA is regulated by the State of New York. NYSERDA retains ownership for the entire site and management responsibility for the SDA and all facilities and areas outside the Project Premises.

Section 2(a)(1-5) of the WVDP Act describes the five actions required of DOE at the WVDP. Actions 1 and 2 address the solidification of the liquid HLW and development of appropriate containers for the solidified HLW. Action 3 requires DOE to transport the solidified HLW to a Federal geologic repository for permanent disposal. Action 4 requires DOE to dispose of low-level and transuranic waste generated by HLW solidification in connection with the WVDP. Action 5 requires DOE to decontaminate and decommission the tanks and facilities used in the solidification of the HLW, and any material and hardware used in connection with the WVDP.

DOE is presently preparing two separate Environmental Impact Statements (EISs): 1) a near-term Waste Management EIS; and 2) a Decommissioning and/or Long-term Stewardship EIS. The Waste Management EIS will address DOE's decisions associated with Actions 3 and 4. NRC is not involved in the development or review of the Waste Management EIS. The Decommissioning and/or Long-term Stewardship EIS (herein referred to as the Decommissioning EIS, or DOE/NYSERDA EIS) will address DOE's remaining activities under the WVDP Act as stipulated in Action 5, any waste management activities under Action 4 that could arise as a result of decommissioning activities, and reasonably foreseeable activities relative to decommissioning or long-term stewardship of the balance of the Center. NYSERDA is a co-lead in the development of the Decommissioning EIS. This EIS will also evaluate potential management and disposition actions for those facilities and areas, including the SDA, for which NYSERDA is responsible. The NRC will participate in the Decommissioning EIS as a cooperating agency. The U.S. Environmental Protection Agency (EPA), and New York State Department of Environmental Conservation (NYSDEC) will also participate as cooperating agencies.

NRC recognizes that the approach to decommissioning at West Valley may include portions of the site being released for unrestricted use, portions of the site being released for restricted use, as well as portions of the site remaining under license because of an inability to meet the License Termination Rule (LTR). DOE will determine the manner that facilities, materials, and hardware for which DOE is responsible are managed or decommissioned, in accordance with applicable Federal and State requirements. To this end, DOE will determine what, if any, material or structures for which DOE is responsible will remain on site and what, if any, institutional controls, engineered barriers, or stewardship provisions would be needed. Likewise, NYSERDA will determine the manner that facilities and property for which NYSERDA is responsible are managed and decommissioned, in accordance with applicable Federal and State requirements. To this end, NYSERDA will determine what, if any, material or structures for which it is responsible would remain on the site and what, if any, institutional controls, engineered barriers, or stewardship provisions would be needed.

4.0 Overview of NRC's Approach

It is important to note that DOE is not an NRC licensee at the West Valley site. DOE's decommissioning activities for the WVDP are conducted under the WVDP Act, as opposed to the AEA. Under the WVDP Act, NRC is not specifically authorized to regulate DOE activities, enforce DOE's compliance with NRC's decommissioning criteria, or determine whether or when

DOE has completed decommissioning. However, the WVDP Act does give NRC certain responsibilities, including the prescription of decommissioning criteria and informal review, consultation and monitoring responsibilities for the purpose of assuring public health and safety. These responsibilities permit NRC to issue public reports during decommissioning to document its position with respect to DOE compliance with NRC decommissioning criteria.

NRC believes that a Decommissioning Plan (DP) should be submitted for the WVDP portion of the site. While DOE is not a NRC licensee, the use of the DP process will assist the NRC staff in obtaining and analyzing the information needed to evaluate the DOE proposal against the NRC decommissioning criteria. This approach is also consistent with the WVDP Act and the 1981 DOE-NRC Memorandum of Understanding (MOU), which calls for the submittal of a DOE DP for NRC review.

On February 3, 2003, NRC requested that DOE submit a DP for the WVDP portion of the site. DOE has agreed to do so in its response on February 28, 2003. NRC requested that the DP be submitted at the same time as the Draft Decommissioning EIS. This will allow parallel review of information in the EIS and DP. We recognize the use of the proposed action in the DP, before the completion of the EIS, is preliminary and subject to change based on the final EIS.

It is expected that DOE's DP will contain most of the information normally contained in a standard DP. However, the DOE DP can refer to internal DOE regulations and DOE Orders to provide some of the information required by NRC to be in a DP. As part of NRC's review of the DOE DP, the staff expects that it will be asking DOE questions and seeking additional information concerning the information contained in the DP. The NRC will develop a Safety Evaluation Report, based on the information in the DP, to document its determination of whether DOE's preferred alternative will meet the decommissioning criteria. DOE's DP may also be used as documentation to support eventual termination of NYSERDA's site license.

NRC is participating in the development of the West Valley Decommissioning EIS as a cooperating agency. As a cooperating agency, NRC will review and provide comments on the EIS as it is developed. The NRC, after independent assessment, may decide to adopt the Decommissioning EIS in part or in full. If the NRC determines that an EIS supplement is necessary, it would publish its own draft supplemental EIS for public review and comment before finalizing it. In either case, the NRC would issue its own environmental decision. The EIS should discuss all the topics specifically listed in the Policy Statement, such as determination of critical groups and impacts of any incidental waste determinations. NRC believes that the DOE can discuss these topics at a high level in the EIS and should present the details in the DP, so that staff can use the DP to make its determination on whether the preferred alternative meets NRC's decommissioning criteria.

The WVDP Act does not address license termination of the NRC license for the site, or portions thereof. License termination will be conducted (if license termination is possible and pursued) under the AEA. If NYSERDA decides to terminate the license, NYSERDA will be required to submit a DP. As previously noted, NYSERDA's license was put in abeyance in 1981 until DOE completes all of its obligations under the WVDP Act. Therefore, NYSERDA's NRC license is presently not in effect and the NRC cannot perform a licensing action. However, the NRC encourages NYSERDA to submit a proposed DP at approximately the same time as DOE's DP. This will assist the NRC in evaluating DOE's proposal and understanding the planned

remediation for the entire site for dose modeling purposes. NYSERDA's proposed DP will be considered to be part of a pre-licensing action and will not be docketed or approved until after the license has been reinstated. NYSERDA's proposed DP should contain all the information normally contained in a licensee's DP. As part of NRC's review of NYSERDA's proposed DP, the staff expects that it will be asking NYSERDA questions and seeking additional information concerning the information contained in the DP.

After the license has been reinstated, NRC expects NYSERDA to formally submit for docketing an updated DP to reflect the actions DOE has completed and any changes to NYSERDA's planned remediation activities. This will allow the staff to take into account the residual contamination left at the site after DOE has completed its activities. The NRC will review the DP in accordance with NRC's standard decommissioning review process and will take into account, as warranted, the previous information obtained during the review of DOE's DP.

If NYSERDA pursues either license termination or partial site release, NRC will need to conduct an environmental review to determine if an EIS is necessary to support such a licensing action.

5.0 NRC Statutory Responsibility for the West Valley Site

5.1 West Valley Demonstration Project Act (WVDPA)

- Prescribe decontamination and decommissioning criteria
- Designate materials, other than those defined in the statute, as HLW
- DOE-NRC Memorandum of Understanding (MOU) provides for informal review and consultation on DOE activities to assure public health and safety. Specific provisions for decontamination and decommissioning, provide that: 1) DOE to perform an analysis of impacts and risks of potential disposition modes of tanks and other facilities in which HLW was stored, and facilities, materials and hardware used in connection with the WVDPA; 2) NRC will prescribe decontamination and decommissioning requirements; 3) DOE will prepare a Project Decommissioning Plan; and 4) DOE will prepare a Site Status Report.
- Prescribe concentrations of transuranic elements as contaminants in materials at West Valley to be treated as transuranic waste
- Monitor Project activities

5.2 Atomic Energy Act (AEA)

- Regulatory authority of 10 CFR Part 50 license
- Ensure public health and safety for licensed facilities/activities
- Inspect licensed facilities/activities
- Terminate license

5.3 National Environmental Policy Act (NEPA)

- The statements of consideration for the Generic Environmental Impact Statement (GEIS) for the LTR provides that a site-specific EIS be prepared in cases where the range of environmental impacts of the alternatives at a specific site may not be within those considered in the GEIS. Examples include cases where land use restrictions or

institutional controls are relied on, where alternate decommissioning criteria are proposed, and where impacts and costs are evaluated in deciding whether or not exhumation of past buried waste is necessary.

- Participate as a cooperating agency in Decommissioning EIS
- Conduct environmental review to determine if an EIS is necessary for license termination

6.0 Key Provisions from the Final Policy Statement

This section highlights (italicized text) key provisions taken directly from the Final Policy Statement. Additional information concerning certain provisions are provided below as staff notes. For a more comprehensive discussion, staff and interested stakeholders should refer to the Final Policy Statement on the decommissioning criteria for the WVDP. A listing of specific requirements and expectations from the Final Policy Statement is provided in Table 1.

6.1 Decommissioning Criteria for WVDP

Under the authority of the WVDP Act, the Commission is prescribing NRC's LTR as the decommissioning criteria for the WVDP, reflecting the fact that the applicable decommissioning goal for the entire NRC-licensed site is compliance with the requirements of the LTR. The criteria of the LTR shall apply to the decommissioning of: (1) HLW tanks and other facilities in which HLW, solidified under the project, was stored; (2) facilities used in the solidification of the waste; and (3) any material and hardware used in connection with the WVDP.

The resulting calculated dose from the WVDP at the West Valley site is to be integrated with all other calculated doses to the average member of the critical group from the remaining material at the entire NRC-licensed site to determine whether the LTR criteria are met.

The final end-state may involve a long-term, perpetual license, or other innovative approaches for some parts of site where clean up to the LTR requirements are prohibitively expensive or technically impractical. The Commission believes that for those portions of the site that are unable to demonstrate compliance with the LTR's restricted release requirements, the dose limits should be viewed as goals, in order to ensure that cleanup continues to the maximum extent that is technically and economically feasible. If complying with the LTR's restricted release requirements is technically impractical or prohibitively expensive, then an exemption from the LTR may be appropriate, provided the protection of the public and the environment can be maintained.

Staff Note on Decommissioning Criteria for WVDP:

The Final Policy Statement asserts that a flexible approach to decommissioning is needed both to ensure that public health and safety and the environment are protected, and to define a practical resolution to the challenges that are presented by the site. The Commission recognizes that health and safety and cost-benefit considerations may justify the evaluation of alternatives that do not fully comply with the LTR criteria. If parts of the NRC-licensed site cannot meet the LTR, the Commission will consider alternatives to the criteria in the LTR if it can be demonstrated that public health and safety will be protected. Specific examples of these alternatives are a long-term or perpetual license for some parts of the site. If a long-term or

perpetual license is necessary for any portion of the site, it is the Commission's intent that that portion of the site be decontaminated to the extent technically and economically feasible. In NRC's April 17, 2002, public meeting on the Final Policy Statement, DOE staff stated that its goal is to decommission the WVDP in compliance with the LTR.

In addition, Subpart N of Part 20 contains provisions for potential exemptions. Exemptions to NRC regulations can be issued if the Commission determines that the exemption is authorized by law and would not result in undue hazard to life or property. Any exemption, should one be requested, would need to meet the Commission's expectation that all parts of the site be decommissioned to the extent technically and economically feasible. An exemption would not be approved by the Commission without prior public participation, involvement of the EPA, and a Commission determination that there is reasonable assurance that there would not be undue hazard to life and property.

6.2 Decommissioning Criteria for the NRC-Licensed Disposal Area (NDA) and State Licensed Disposal Area (SDA)

NRC will apply the criteria in the LTR to the NDA, because the NDA is under NRC jurisdiction. The Commission believes that an analysis of impacts beyond 1,000 years should be provided in the DOE/NYSERDA EIS.

NRC does not have regulatory authority to apply the LTR to the SDA, because the SDA is regulated by the State of New York. NRC recognizes that a cooperative approach with the State to the extent practical should be utilized to apply the LTR criteria in a coordinated manner to the NRC-licensed site and SDA.

6.3 Decommissioning Criteria for License CSF-1 (NRC Site License)

The criteria in the LTR will also apply to the termination of NYSERDA's NRC license on the West Valley site after that license is reactivated. For those portions of the site covered by the WVDP Act, it is NRC's intent to authorize that any exemptions or alternative criteria authorized for DOE to meet the WVDP Act will also apply to NYSERDA at the time of site license termination, if license termination is possible.

Staff Note on Decommissioning Criteria for NRC Site License:

The Commission has decided to prescribe the LTR criteria for the WVDP, reflecting the conclusion that the appropriate decommissioning goal for the entire NRC-licensed site is compliance with the LTR. Therefore, the doses from the WVDP and non-WVDP area need to be integrated to determine if the entire NRC-licensed area meets the LTR. It is not NRC's intent to specify a specific fraction of the dose limits to WVDP versus the non-WVDP portion of the NRC-licensed site. Rather, as co-leads for the Decommissioning EIS, DOE and NYSERDA are responsible for determining what fraction of the dose limit will be allocated to the WVDP versus the non-WVDP portion of the NRC-licensed site. Likewise, DOE and NYSERDA need to determine which facilities, property, and contamination are part of the WVDP and which are part of the non-WVDP portion of the NRC-licensed site. The results of these determinations should be addressed in the Decommissioning EIS.

6.4 Incidental Waste Criteria

Under the authority of the WVDP Act, the Commission is issuing criteria for the classification of reprocessing wastes that will likely remain in tanks at the site after the HLW is vitrified. The Commission criteria that should be applied to incidental waste determinations are: (1) waste should be processed (or should be further processed) to remove key radionuclides to the maximum extent that is technically and economically practical; and (2) waste should be managed so that safety requirements comparable to the performance objectives of 10 CFR Part 61, Subpart C, are satisfied. The dose methodology used in Parts 61 and 20 are comparable, however NRC expects DOE to use the newer methodology in Part 20 based on International Commission on Radiological Protection Publication 26.

Staff Note on Incidental Waste Criteria:

The Commission decided to issue criteria for waste incidental to reprocessing (WIR) to clarify the status of and classify any residual waste present after cleaning of the HLW tanks. The Commission believes that the concept of incidental waste is implicit within the WVDP Act, as well as other statutes, that address HLW. These criteria are risk-informed and performance-based, in that these criteria allow DOE to develop innovative approaches to meeting the performance objectives in 10 CFR Part 61. This approach emphasizes risk, while maintaining doses as low as is reasonably achievable. In effect, DOE should undertake cleanup to the maximum extent that is technically and economically practical and should achieve performance objectives consistent with those NRC demands for the disposal of low-level waste. The resulting calculated dose for incidental waste should be integrated with all other calculated doses from residual radioactive material at the NRC-licensed site to ensure that the LTR criteria are met.

The environmental impacts of identifying waste as incidental to reprocessing and not HLW should be considered in DOE's Decommissioning EIS. NRC will review DOE's WIR determination in conjunction with NRC's review of DOE's DP. Therefore, the DP will need to be supplemented to provide adequate information to permit staff's review of DOE's WIR determination (if WIR is part of the preferred alternative). NRC's decision with respect to WIR will be documented in the SER. NRC's decision with respect to WIR determinations will also apply to NYSERDA, when its license is reactivated.

6.5 Previous Burials Authorized under 10 CFR Part 20

The Statement of Considerations for the LTR provided that in regard to past burials the Commission "... would continue to require an analysis of site-specific overall impacts and costs in deciding whether or not exhumation of previous buried waste is necessary for specific sites. In addition, the general exemption provisions of 10 CFR Part 20 are available to consider unique past burials on a case-by-case basis."

The NDA contains significant amounts of buried radioactive material that was previously authorized under older provisions of Part 20. This material will require appropriate evaluation as part of site license termination.

6.6 Environmental Analysis

The environmental impacts of applying the LTR to NRC licensees were evaluated in the GEIS that supported the LTR. In promulgating the LTR, the Commission stated that it will conduct an environmental review to “determine if the generic analysis encompasses the range of environmental impacts at the particular site.” The Commission further stated that it “will conduct an independent environmental review for each site-specific decommissioning decision where land use restrictions or institutional controls (IC) are relied upon by the licensee or where alternative criteria are proposed.”

The environmental impacts from the application of the criteria will need to be evaluated for the various alternative approaches being considered in the process before NRC decides whether to accept the preferred alternative for meeting the criteria permitted by the LTR. NRC intends to rely on the DOE/NYSERDA EIS for this purpose.

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. NRC does not anticipate the need to prepare its own duplicative EIS, since it can consider the environmental impacts described in DOE’s EIS in approving the particular decommissioning criteria for the WVDP under the LTR. If NRC is satisfied with the DOE/NYSERDA EIS, this EIS will fulfill the NEPA responsibilities for NRC under the WVDP Act. If NRC is not satisfied with the final DOE/NYSERDA EIS, NRC will adopt as much of it as possible and modify or supplement it as necessary. In such a situation, NRC would publish its own draft EIS for public review and comment before finalizing it. Once finalized, NRC’s NEPA responsibilities would be fulfilled under the WVDP Act.

The WVDP Act does not address license termination for the site. License termination for the site, or portions thereof, is conducted (if license termination is possible) under the AEA. If NYSERDA pursues either full or partial license termination of the NRC license, at that time NRC will need to conduct an environmental review to determine if an EIS is necessary to support license termination.

Staff Note on Environmental Analysis:

The Final Policy Statement states that the application of the LTR to the WVDP is a two-step process: (1) NRC has prescribed the application of the LTR; and (2) after the completion of the site-specific Decommissioning EIS and selection of preferred alternative, NRC will verify that the approach proposed in the EIS is appropriate.

In accordance with the Final Policy Statement, NRC is participating in the development of the West Valley Decommissioning EIS as a cooperating agency. As a cooperating agency, NRC will review and provide comments on the EIS as it is developed. In this capacity, NRC will be exchanging relevant information on the Decommissioning EIS, applying technical expertise and staff support, avoiding duplication with other Federal and State procedures and establishing a mechanism for addressing intergovernmental issues. This arrangement assures that NRC views on the EIS are communicated to DOE, NYSERDA, and other cooperating agencies in a timely manner. The decision on whether the preferred alternative satisfactorily addresses the decommissioning criteria set forth in the NRC Final Policy Statement will be made by NRC, as

an independent regulatory agency, once DOE's DP and EIS are completed and submitted for review. The NRC, after independent assessment, may decide to adopt the Decommissioning EIS in part or in full. If the NRC determines that an EIS supplement is necessary, it would publish its own draft supplemental EIS for public review and comment before finalizing it. In either case, the NRC would issue its own environmental decision.

The background published as part of the Final Policy Statement states that the EIS should address the following:

- the loss of institutional controls;
- a determination of whether the peak doses might occur beyond 1000 years and the dose consequences and impacts on potential long-term management of residual radioactivity at the site;
- the derivation of critical groups;
- cost/benefit analysis;
- isolation capability, durability, and robustness of engineered barriers. The dose analysis should consider a breach of the barriers by an inadvertent intruder;
- identification of the long-term steward and how long-term stewardship is maintained;
- issues regarding the variety of options for the end state of the site (i.e., unrestricted release, restricted release, an exemption, or perpetual license);
- an evaluation of the environmental impacts from the application of the criteria for the various alternative approaches being considered;
- the number of sources to which the critical group is exposed;
- the impacts of identifying waste as incidental to reprocessing;
- alternative approaches to decommissioning;
- evaluation of impacts of removing previously buried waste

7.0 Decommissioning Process and Decision-making

7.1 NRC's Standard Decommissioning Process under AEA

This section describes NRC's basic decommissioning process as described in NRC's Consolidated NMSS Decommissioning Guidance, Vol. 1 (NUREG-1757). While the steps may vary for different sites, the basic process is the same. Licensees are required to complete the following steps in the decommissioning process:

1. Determine the location of remaining radiological contamination.
2. If necessary, develop a DP that:
 - describes the current condition and radiological contamination at the site;
 - states the criteria for the final condition of the site;
 - identifies activities to remediate existing contamination that are not currently authorized by license;
 - describes procedures to protect workers;
 - includes decommissioning cost estimates;
 - specifies the final survey method to demonstrate compliance with NRC criteria; and
 - provides a schedule for remediation activities and license termination.

3. If necessary, provide environmental information for NEPA compliance.
4. Clean up contamination, as needed.
5. Conduct final status survey to show compliance with dose limits for license termination.
6. Request that NRC terminate the license.

If a DP is required, the licensee submits a DP for all or part of the facility. Decommissioning is a two-step process: 1) the licensee must submit a plan demonstrating that the NRC decommissioning standard will be met; and 2) the NRC independently reviews and approves the DP. The DP is processed in the following manner:

1. NRC conducts an acceptance review to decide if the plan is complete:
 - NRC determines if appropriate information is present (see NUREG-1727 Appendix A, or NUREG-1757 Appendix D)
 - NRC determines if there is sufficient information to evaluate proposed decommissioning alternative, including current condition of site, release criteria and important values (e.g., residual concentrations), land use scenario and critical group(s), and final survey plan.
2. If the DP is not complete, then NRC rejects the DP, and the licensee is informed in writing.
3. If the DP is complete and is accepted for technical review, then NRC conducts a detailed technical evaluation of the plan from environmental (NEPA) and safety perspectives.
4. If the information is not sufficient for NRC to complete the environmental and safety reviews, NRC requests additional information (RAI).
5. Upon receipt of RAI, the licensee revises the plan and NRC reviews the revision.
6. NRC documents the results of staff's safety and environmental reviews in a Safety Evaluation Report (SER) and Environmental Assessment or EIS, and issues a license amendment approving the DP. The SER documents staff's evaluation of assumptions and models used to calculate the potential dose to the average member of critical group.
7. Upon approval, the licensee implements the plan. NRC conducts in-process inspections to verify compliance.
8. At the completion of remediation, the licensee conducts a final status survey to demonstrate compliance with license termination criteria.
9. NRC verifies the survey by using QA/QC reviews, split sampling, and independent, confirmatory surveys.

10. If the survey does not demonstrate compliance, additional remediation and/or surveys are required.
11. When the survey demonstrates compliance with release criteria, NRC terminates the license, or modifies the license for partial site release.

For sites that require a DP, the NRC publishes notices in the Federal Register. NRC issues one notice in the Federal Register upon receipt of the DP for review and a second notice upon approval of the DP. NRC may also schedule a public meeting to discuss the proposed actions with interested and affected parties.

7.2 Decommissioning Considerations for Restricted Site Use under AEA

NRC recognizes that there are certain difficult sites, or portions of sites, where license termination with restrictions may be appropriate. In such cases, the licensee must provide additional information to demonstrate that the site is acceptable for license termination under restricted conditions. This information should be sufficient to allow NRC to determine:

- That further reductions in residual radioactivity would result in net environmental harm, or not be necessary because the proposed levels are as low as reasonably achievable (ALARA).
- There are adequate institutional controls (ICs) to limit the total effective dose equivalent (TEDE) to the public to less than 25 mrem/yr.
- There is sufficient financial assurance for an independent third party to assume control of the site and perform necessary maintenance at no cost.
- There is agreement by a competent party to assume control of and responsibility for maintenance of the site.

For sites proposing to decommission by restricted use of the site, the licensee is also required to seek advice from such affected parties regarding the following matters concerning the proposed decommissioning:

- Whether provisions for ICs will
 - provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 25 mrem/yr;
 - be enforceable; and
 - not impose undue burden on the local community or other affected parties.
- Whether sufficient financial assurance exists to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site.
- To provide for sufficient opportunity for the public to participate, the licensee shall provide for the following:
 - participation by representatives of a broad cross section of community interests who may be affected by the decommissioning;

- an opportunity for a comprehensive, collective discussion on the issues by the participants represented; and
 - a publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement or disagreement on the issues among the participants.
- Document in the DP how the advice of individuals and institutions in the community has been sought and incorporated, as appropriate, following analysis of that advice.

Upon receipt of the DP, NRC will evaluate the adequacy of the licensee ICs, financial assurance, and interaction with the public concerning the proposed decommissioning. The evaluation of impacts from restrictions of future land use will also be addressed in the Decommissioning EIS.

7.3 Decommissioning Process Under WVDP Act

One important difference between the standard decommissioning process outlined above and the decommissioning process envisioned for WVDP, and the entire NRC-licensed site, is that there is presently no license in effect. As previously noted, the West Valley site is licensed to NYSERDA, however this license was suspended in 1981 pending the completion of the WVDP. Nevertheless, NRC believes that the decommissioning process for the WVDP should generally follow the same basic steps as NRC's standard decommissioning process, since the WVDP portion of the site will eventually be returned to NYSERDA's control when the WVDP is completed and the NRC license is reinstated. The WVDP Act does not address license termination for the site. The decommissioning steps envisioned for the WVDP are illustrated in Figure 1 and summarized below:

1. DOE submits a DP for the WVDP, and provides a Decommissioning EIS for NEPA compliance (Attachment 1 outlines topics for a DP).
2. NRC conducts a DP acceptance review to decide if the information provided in the plan is sufficient to begin the technical review.
3. After accepting the DP for technical review, NRC conducts a detailed review from an environmental and safety perspective, prepares its preliminary technical evaluation, and requests additional information (RAIs), as necessary.
4. Upon completion of NRC's detailed review of the DP and resolution of RAIs, NRC determines if the preferred alternative for WVDP and entire NRC-licensed site meets the LTR. NRC issues a SER documenting its decision. The SER is supported by an analysis of environmental impacts from the application of the criteria.
5. DOE conducts remediation in accord with DP.
6. NRC conducts in-process monitoring inspections.
7. DOE submits Final Status Survey (FSS) to show compliance with Derived Concentration Guideline Limits (DCGLs).

8. NRC reviews FSS and may conduct confirmatory survey.

7.4 Decommissioning Decisions under WVDP Act

- NRC reviews DOE DP and Decommissioning EIS and makes a decision (SER) on whether to accept the preferred alternative for meeting the criteria permitted by the LTR.
- NRC makes determination on adequacy of ICs if restrictions on site use are proposed.
- NRC reviews DOE/NYSERDA EIS and makes environmental decision to adopt or supplement this EIS which evaluates the environmental impacts from the application of NRC's decommissioning criteria.
- NRC reviews DOE's WIR determinations in conjunction with NRC's safety and environmental decisions.

8.0 License Termination Process and Decision-making

8.1 License Termination Process under AEA

The West Valley site is licensed pursuant to 10 CFR Part 50. As such, NRC has regulatory authority for this license under the AEA. As previously noted, the license was suspended in 1981 to execute the 1980 WVDP Act. Following the completion of DOE activities under the WVDP Act, the license will be reinstated and control of the entire site will be returned to NYSERDA. At that time, NYSERDA may seek to terminate all or a portion of the license. The Final Policy Statement states that license termination, if license termination is possible and pursued, will be conducted under the AEA.

NYSERDA is encouraged to submit a DP at approximately the same time that DOE submits its DP so the DOE and NYSERDA DPs may be evaluated together to determine whether the entire site will meet the criteria in the LTR. However, the staff does not plan to approve the NYSERDA DP until after DOE has completed decommissioning activities and NYSERDA's license is reinstated.

The staff's review of the NYSERDA's DP will follow NRC's basic decommissioning process as previously discussed including an acceptance review, detailed review, RAIs, and safety and environmental reviews. The NRC environmental review will be conducted to determine if an EIS is necessary to support license termination. The license termination process for the NRC-licensed site is illustrated in Figure 2. Upon approval of the DP, NRC will amend NYSERDA's license to incorporate the plan. The NRC will terminate the NYSERDA's license if it determines that the decommissioning has been performed in accordance with the approved DP, and the terminal radiation survey and associated documentation demonstrates that the facility and site are suitable for release in accordance with NRC decommissioning criteria in 10 CFR Part 20, Subpart E.

8.2 License Termination Decisions under AEA

- NRC reviews NYSERDA's DP and makes its safety decision in an SER on whether to accept the proposed action for meeting the criteria permitted by the LTR.
- NRC makes determination on adequacy of ICs if restrictions on site use are proposed.

- NRC conducts environmental review and determines if EIS is necessary to support license termination.
- NRC terminates license for all or part of site.

9.0 Stakeholder Communication

In implementing the Final Policy Statement, NRC will continue to interact with internal and external stakeholders. NRC has developed a communication plan for the decommissioning of the West Valley site. This plan provides guidance for NRC interactions with DOE, NYSERDA, other regulators and members of the general public. In addition, NRC participated with other regulators in the development of a Regulators Communication Plan on the Application of Cleanup Requirements for Decommissioning the West Valley site. The Regulators Communication Plan identifies applicable regulatory requirements/expectations, and identifies the roles and responsibilities of involved regulatory agencies.

NRC anticipates participating in a variety of meetings to accommodate different stakeholders. These meeting types include: NEPA/EIS meetings, AEA meetings, WVDP meetings, regulator meetings, Citizen's Task Force meetings Seneca Nation meetings, and meetings with the general public to provide information on the decommissioning process. NRC may also be involved in public outreach in conjunction with its role as a cooperating agency for the Decommissioning EIS. NRC will continue to correspond with various stakeholders to clarify its position with respect to decommissioning questions and issues.

10.0 Schedule for Decommissioning

NRC plans to conduct its decommissioning activities in accord with DOE's schedule for the development of the Decommissioning EIS, DP, site remediation, and the submission of FSS showing compliance with NRC's decommissioning criteria. NRC staff recommends that DOE's Decommissioning EIS and DP, and NYSERDA's DP, be developed concurrently. The staff believes this approach provides the best prospect of reducing the time frame for NRC's determination on whether DOE's preferred alternative meets NRC's decommissioning criteria. The staff believes this is the most effective approach to support an NRC determination on the preferred alternative.

The schedule for license termination will be established after the completion of the WVDP and reinstatement of NYSERDA's site license. NYSERDA's schedule for the completion of decommissioning and license termination will be incorporated in its DP.

11.0 Supporting Guidance

- Consolidated NMSS Decommissioning Guidance, Vol. 1 (NUREG-1757).
- NMSS Decommissioning SRP (NUREG-1727).
- Environmental Review Guidance for Licensing Actions Associated with NMSS Programs (NUREG-1748).
- Multi-Agency Radiation Survey and Site Investigation Manual (NUREG-1575, Rev.1).

Table 1 Specific Requirements/Expectations of Final Policy Statement

| |
|---|
| NRC determination that EIS preferred alternative meets NRC decommissioning criteria |
| Prescribe LTR as the criteria for the WVDP, reflecting the fact that the applicable decommissioning goal for the entire NRC-licensed site is compliance with the requirements of the LTR. The criteria of the LTR shall apply to decommissioning of: HLW tanks and other facilities in which HLW stored; facilities used in the solidification of waste; and any material and hardware used in connection with the WVDP. |
| NRC License Termination Rule (LTR) 10 CFR Part 20, Subpart E <ul style="list-style-type: none">- Unrestricted release 25 mrem/yr + ALARA- Restricted release:<ul style="list-style-type: none">(IC in place) 25 mrem/yr + ALARA(IC fail) 100 mrem/yr, or 500 mrem/yr (rare cases)Alternate Criteria:<ul style="list-style-type: none">(IC in place) 25 - 100 mrem/yr |
| Criteria to be applied to incidental waste determinations: (1) the waste should be processed (or should be further processed) to remove key radionuclides to the maximum extent that is technically and economically practical; and (2) the waste should be managed so that safety requirements comparable to the performance objectives in 10 CFR Part 61 subpart C, are satisfied. |
| Calculated dose for incidental waste to be integrated with all other doses from remaining material at the NRC-licensed site. |
| Allow consideration of long-term or perpetual license or other approaches for parts of the site where cleanup to LTR is prohibitively expensive or technically impractical. |
| LTR is decommissioning criteria for NDA. |
| Decommissioning EIS will consider analysis of impacts beyond 1000 years. |
| Coordinated approach with State in applying LTR criteria to NDA and SDA. |
| Site-specific analysis of impacts and costs in deciding on whether or not to exhumate previous burials. Allow consideration of exemptions for unique past burials on case-by-case basis. |
| LTR applies to termination of NRC license after the license is reactivated. NRC's intent is that any exemption or alternative criteria authorized to meet provisions of WVDPA will also apply to the termination of NRC license. |
| The Decommissioning EIS should also address the bullets listed in Section 6.6. |

Attachment 1

Outline of Standard Decommissioning Plan

Executive Summary

- Chapter 1 Facility Operating History**
- Chapter 2 Facility Description**
- Chapter 3 Radiological Status of Facility**
- Chapter 4 Dose Modeling**
- Chapter 5 ALARA Analysis**
- Chapter 6 Planned Decommissioning Activities**
- Chapter 7 Project Management and Organization**
- Chapter 8 Health and Safety Program During Decommissioning**
- Chapter 9 Environmental Monitoring and Control Program**
- Chapter 10 Radioactive Waste Management Program**
- Chapter 11 Quality Assurance Program**
- Chapter 12 Facility Radiation Surveys**
- Chapter 13 Financial Assurance**
- Chapter 14 Restricted Use/Alternate Criteria**

Figures

Attachments

FIGURE 1- DECOMMISSIONING PROCESS FOR WVDP UNDER WVDP ACT

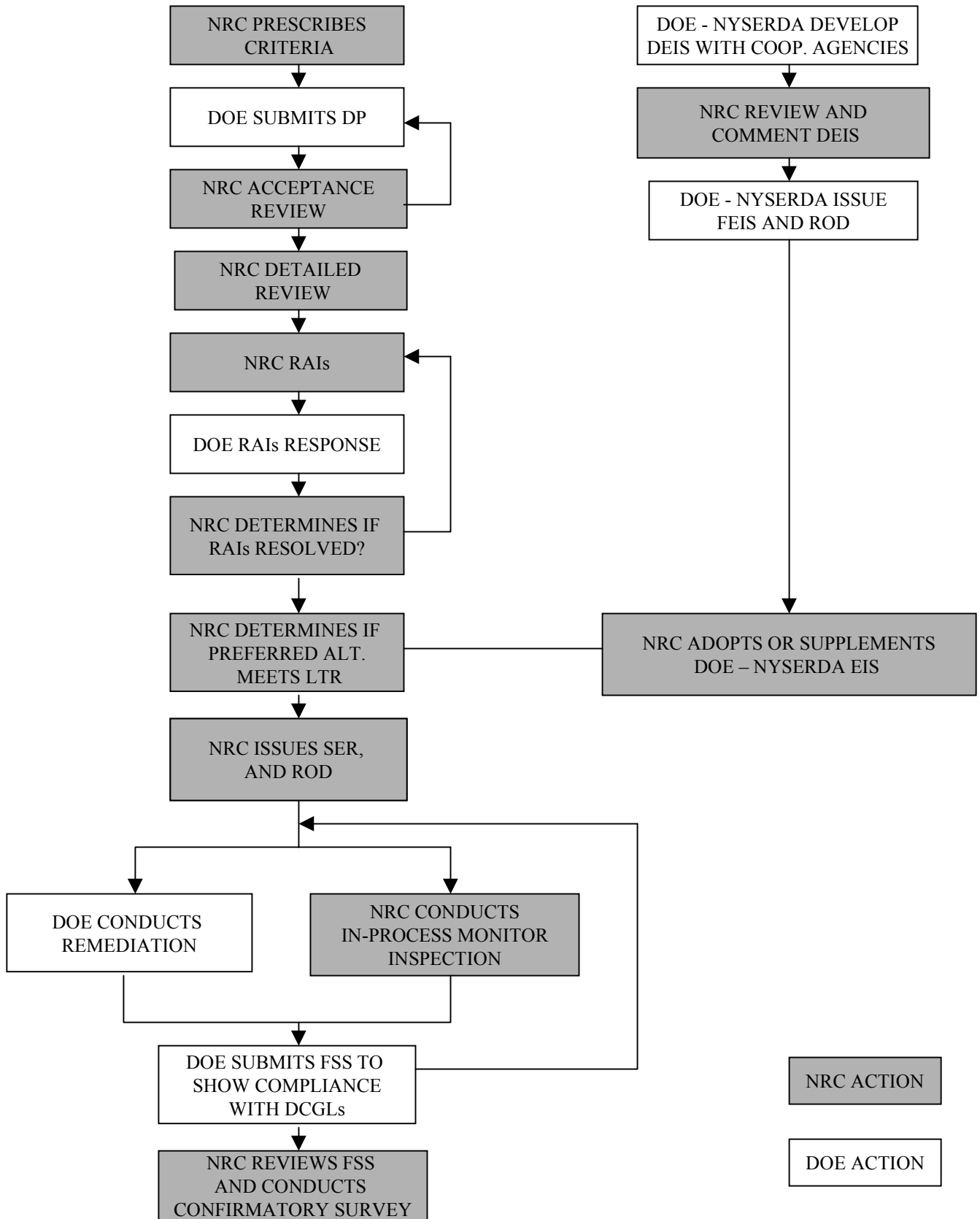


FIGURE 2-LICENSE TERMINATION PROCESS FOR NRC-LICENSED SITE UNDER AEA

