

REGION I MONITORING ACTIVITIES FOR THE DEPARTMENT OF ENERGY WEST VALLEY DEMONSTRATION PROJECT

0111-01 PURPOSE

This Inspection Manual Chapter (IMC) establishes responsibilities and provides guidance for Region I's monitoring program at the Department of Energy's (DOE) West Valley Demonstration Project (WVDP) at West Valley, New York. The U.S. Nuclear Regulatory Commission's (NRC) WVDP monitoring is one mechanism in which the NRC will provide the DOE with independent analyses to assist the DOE in fulfilling its responsibility for public health and safety.

0111-02 OBJECTIVES

Region I will monitor and document the results of monitoring activities at the WVDP site related to design, construction, equipment installation, operational and decommissioning activities conducted by the DOE that may radiologically affect public health and safety. The technical monitoring program is conducted to help fulfill NRC's responsibility for monitoring the WVDP as mandated by Public Law 96-368, the "West Valley Demonstration Project Act of 1980," (the Act) and formally implemented by the Memorandum of Understanding (MOU) between the DOE and the NRC (*Federal Register* Notice, Vol. 46, No. 223, page 56960, November 19, 1981 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML110800494)). In accordance with this MOU, the Director, Office of Nuclear Material Safety and Safeguards (NMSS), is assigned responsibility for ensuring the implementation of the agreement. Per this MOU, the Project Manager, NMSS, is designated as the NRC point of contact for all communications relating to carrying out the provisions of the Agreement.

The objective of the NRC's WVDP monitoring program activities is to establish the NRC requirements and guidance for NRC staff for conducting its monitoring responsibilities. Monitoring, as well as review and consultation, are mechanisms in which NRC may advise the DOE to ensure there is reasonable assurance that the DOE's WVDP facilities and operations protect the public health and safety from potential radiological danger. These NRC activities shall be conducted informally and shall not be subject to formal Commission procedures or actions required by law for licensed activities; therefore, no inspection procedure for monitoring the WVDP activities is associated with this IMC.

DOE has responsibility for the public health and safety associated with this project at the WVDP per the WVDP Act. The focus of Region I monitoring activities is on DOE's WVDP site operations and decommissioning activities that could potentially impact public health and safety. Region I will inform its monitoring visits, as needed, by reviewing the decommissioning plans (DPs) (Phase 1 DP and Phase 2 DP) and work plans as outlined in the DPs and other site documents, such as the Annual Site Environmental Report, the NRC Commission's Final Policy Statement on West Valley (Decommissioning Criteria for the West Valley Demonstration Project [[67 FR 5003](#)];

[February 1, 2002](#)] and descriptions, operating limits, minimum conditions included in the DOE WVDP's technical specifications and documented safety analyses. The applicable (radiological) requirements and commitments in these documents will be used by the NRC inspection staff as the criteria for the conduct of the NRC's monitoring program at the WVDP site.

0111-03 DEFINITIONS

03.01 Monitoring Activities. For monitoring activities, the NRC inspection staff will review, evaluate, and take environmental measurements, as needed, related to implementation of DOE WVDP site operations and decommissioning activities at the WVDP that pertain to public health and safety or could potentially radiologically impact public health and safety. The activities may include review and examination of documents and drawings. The NRC inspection staff with technical expertise in areas such as engineering, decommissioning, health physics, environmental monitoring, and quality assurance will be conducting the monitoring, commensurate with the ongoing activities at the site, based on the scope of the monitoring visit. In addition, NRC monitoring activities may involve direct observation and documentation of the DOE WVDP activities as well as the assessment of the effectiveness of the DOE's implementation of programs and procedures that relate to health and safety on the WVDP retained premises and potential offsite impacts due to WVDP operations.

03.02 Project Premises. Under the provisions of the Act, DOE exercises control over a portion of the Western New York Nuclear Service Center (the Center) for the purpose of carrying out the WVDP. Through the issuance of NRC License No. CSF-1, Amendment No. 31, the license authorized the DOE on a portion of the NRC licensed site (the Center) and certain requirements for the licensees were put into abeyance until DOE's WVDP mission is complete. The area controlled by DOE comprises approximately 168 acres, is located in the approximate middle of the Center (NRC licensed facility) and contains the facilities that were previously used by Nuclear Fuel Services, Inc. (NFS) from 1966 through 1972 to reprocess spent nuclear fuel. Refer to the Executive Summary of the Phase 1 WVDP Decommissioning Plan (DP) (ADAMS Accession No. ML100040393) for figures showing the location of the project premises.

03.03 West Valley Phased Decommissioning. The DOE and the current licensee, the New York State Energy Research and Development Authority (NYSERDA), determined that a phased decommissioning¹ would be conducted at the WVDP site. The Phased Decision-making Alternative was set forth in the Final Environmental Impact Statement (FEIS). This FEIS was jointly prepared by NYSERDA and the DOE and it was published on January 29, 2010, for the West Valley site. The FEIS identified Phased Decision-making as the preferred alternative for the West Valley cleanup. The NRC was a cooperating agency to this FEIS. During Phase 1, DOE will remove significant sources of contamination from the site at a cost of over \$1 Billion. Other key facilities, including the State-Licensed Disposal Area (SDA), a 15-acre former commercial low-level radioactive waste disposal facility regulated under State License, will continue under NYSERDA active management during Phase 1. The SDA was never licensed by NRC and was never part of NRC License CSF-1. After the issuance of the FEIS, NYSERDA and DOE conducted additional scientific studies during Phase 1 Decommissioning Plan (DP) implementation, with the goal of reducing the uncertainties associated with the Phase

¹ Rationale for phased decommissioning decision if found on page 13 of the Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center- A Summary and Guide for Stakeholders

2 decisions. DOE has completed its Phase I DP and provided it to the NRC for review and acceptability. The NRC has reviewed and it and found it acceptable. As of 2017, the DOE and NYSERDA, are performing a supplemental environmental impact statement (SEIS) for Phase 2. The NRC is a cooperating agency to the SEIS. After DOE and NYSERDA select a preferred alternative for the SEIS, they will make decommissioning decisions, using the SEIS to inform its decisions. DOE and NYSERDA made business decisions regarding cost sharing, in part, per the Consent Decree No. 06-CV-810. Cost sharing is not within the scope of the NRC's roles and responsibilities. Thereafter, DOE will prepare a Phase 2 DP and provide it to the NRC for review for acceptability.

0111-04 RESPONSIBILITIES AND AUTHORITIES

04.01 Director, Office of Nuclear Materials Safety and Safeguards.

- a. Approves the monitoring program.

04.02 Regional Administrator, Region I

- a. Ensures that the program is conducted and documented in accordance with this instruction.
- b. Ensures that Region I staff having the proper technical discipline and expertise are made available and perform monitoring activities, as required.

04.03 Director, Division of Nuclear Material Safety, Region I

- a. Develops and assesses the effectiveness of the conduct of the program.
- b. Prepares budget requests for the program.
- c. Ensures that the Decommissioning, ISFSI (Independent Spent Fuel Storage Installation), and Reactor Health Physics Branch conducts and documents the program in accordance with this IMC.

04.04 Chief, Decommissioning, ISFSI, and Reactor Health Physics Branch, Region I

- a. Oversees the planning and coordination of monitoring visits
- b. Requests technical expertise from other Region I branches, as needed.
- c. Provides timely documentation of monitoring activities and results.
- d. Participates in WVDP planned Regulatory Round tables or other special meetings, as appropriate.

04.05 Director, Division of Decommissioning, Uranium Recovery, and Waste Programs.

- a. Plans and implements NRC activities for the WVDP Program.
- b. Ensures that the NMSS WVDP monitoring is implemented for appropriate monitoring

activities at the WVDP in accordance with this ICM.

- c. Provides applicable contracted technical assistance.
- d. Coordinates preparation of the NRC's WVDP monitoring program.
- e. Integrates NRC's WVDP monitoring programs with other WVDP activities.

04.06 NMSS Project Manager

- a. Ensures that Region I's Division of Nuclear Materials Safety receives necessary project documents related to its monitoring responsibilities;
- b. Provides guidance and coordinates with Region I on scheduling monitoring visits to the site and provides suggestions on areas that should be monitored based on WVDP consultation interactions and WVDP document reviews.
- c. Acts as the NRC's point of contact with the DOE for the WVDP per the Memorandum of Understanding (MOU) between the DOE and the NRC (Federal Register Notice, Vol. 46, No. 223, page 56960, November 19, 1981 (ADAMS Accession No. ML110800494)). However, the NRC inspector is the point of contact with the DOE WVDP's operations staff representative who coordinates the NRC monitoring visits with the NRC. Per the DOE-NRC MOU, the PM discusses (informally) the monitoring results with the respective DOE Project Manager.

04.07 DNMS Inspector

- a. Performs monitoring functions per this IMC.
- b. Coordinates with DOE Operational staff on planning and executing monitoring visits.
- c. Plans and implements monitoring activities in coordination with NMSS's designated Project Manager for the WVDP
- d. Documents monitoring visit results in a report.
- e. Participates in WVDP planned Regulatory Round tables or other special meetings, as appropriate.

0111-05 REQUIREMENTS

05.01 Monitoring activities are technical evaluations instead of inspections, because the WVDP is not licensed by the NRC. Monitoring activities will be planned on an ad hoc basis and in coordination with the NMSS Project Manager. Per the DOE-NRC MOU, the NRC will use the descriptions, operating limits, and minimum conditions, included in the DOE WVDP technical specifications and the documented safety analysis as the criteria for conduct of its monitoring program. Also, the NRC will also use the Commission's Final West Valley Policy Statement, as applicable, and documents that DOE provides to the NRC that address public health and safety, such as the DPs and commitments made in the DPs such as providing certain decommissioning work plans and evaluations as criteria to conduct its monitoring program.

05.02 Region I staff will communicate or discuss the results of technical evaluations with DOE through distribution typical of routine monitoring reports, including the NMSS Project Manager and the State of New York. The DOE-NRC MOU indicates that the NMSS Project Manager is NRC's point of contact with the DOE for the WVDP.

05.03 The monitoring results and any technical evaluation conclusions are to be documented as reports from the Chief of Region I's Decommissioning, ISFSI, and Reactor Health Physics Branch to the DOE West Valley Project Manager, with a copy to the NMSS Project Manager and the appropriate representatives from the State of New York. Also, the monitoring reports will detail the activities covered to enable subsequent review of the activities to assure that proper evaluations have been completed. All reports are official NRC records and must be retained in accordance with the approved schedule of records retention and disposal (Office of Administration).

05.04 Monitoring visits should be conducted, as warranted. The inspector should keep the NMSS Project Manager informed on scheduled or upcoming monitoring visits and their scope. Monitoring visits should focus on decommissioning activities commensurate with their level of risk or applicability to the MOU and the Phase 1 and Phase 2 DPs and shall be conducted at a minimum frequency of twice per year provided there are active decommissioning activities occurring at the site.

0111-06 GUIDANCE

06.01 The uniqueness of the WVDP and NRC's role makes the use of specific inspection procedures inappropriate. Thus, monitoring activities should be planned on an ad hoc basis and in coordination with the NMSS Project Manager. Similarly, the lead inspector assigned to monitor the WVDP activities, should coordinate with their DOE operations counterpart and keep the NMSS Project Manager informed. Both activities should allow the NRC adequate planning time to be physically present to observe higher risk activities such as building demolition of highly contaminated buildings or when remediation of contaminated areas of soil is conducted should the NRC decide to directly observe such activities.

The current license, CSF-1, Docket 0500201, does not apply to DOE and does not include any license conditions or NRC acceptance criteria for monitoring DOE under the Act or MOU. Similar to other typical NRC inspections, documents ascertained from DOE and provided to the NRC Inspector during the monitoring visit should not be kept or docketed after the monitoring report is issued. However, there are numerous DOE documents that outline DOE commitments to NRC which the NRC staff may need to evaluate. Based on the scope of the monitoring visit, such documents may include the DOE Decommissioning Plans, Characterization Strategy, and work plans submitted to NRC per the MOU. Further, implementation of DOE commitments in such documents should be verified, based on the scope of the monitoring visit and the schedule of the decommissioning activities. The DP identified the DOE's decommissioning strategy and schedule, as well DOE commitments to NRC for the WVDP, such as submittal of specific work plans for NRC review and actions that DOE will take before conducting activities, such as certain building demolitions or remediation. A Phase I DP has been developed and reviewed by NRC and the technical evaluation report on the Phase I DP (ADAMS Accession No. ML100400099) contains NRC expectations regarding implementation of the Phase I DP of which many are applicable to NRC monitoring oversight.

A Phase II DP has yet to be completed as of the issuance of this revision to the IMC. It will be completed after the completion of the Supplemental Environmental Impact Statement for Phase II. Availability of this document and related documents should be submitted to NRC per the MOU and coordination with the NRC Project Manager per the MOU should be an important part of preparation for monitoring activities.

The inspector should be familiar with the NRC Final West Valley Policy Statement and the Regulator's Communication Plan for Implementation of the NRC West Valley Policy Statement as guidance for understanding policy and interagency responsibilities for the WVDP site. During monitoring, interactions should be consistent with this policy, the communication plan, the DOE-NRC MOU, WVDP Act, and, as applicable, expectations or commitments made in any NRC's Technical Evaluation Reports for Decommissioning and Waste Incidental to Reprocessing evaluations and the NRC Headquarters' comment letters on the submitted DOE WVDP's work plans.

06.02 Region I should coordinate with NMSS in a timely manner if there are potential significant potential health and safety concerns² identified during any monitoring visit.

06.03 Any sensitive information should be documented in accordance with NRC procedures. During monitoring activities, the staff should be mindful that during review of certain historical information associated with reprocessing, such historical information may contain sensitive nonpublic information. The content of licensing documents may involve the transfer of nuclear reprocessing technology controlled by Title 10 of the *Code of Federal Regulations* (10 CFR) Part 810, "Assistance to Foreign Atomic Energy Activities," and should be protected accordingly. Reference to NRC Docket 0500201 and PM00032 and the license number should be included in the monitoring report's ADAMS profile.

06.04 Monitoring visits should include a visit with the licensee (NYSERDA) to obtain an independent review of the status of public health and safety. At the staff's discretion based on those discussions, the staff will decide whether additional interviews with DOE staff or observation of WVDP activities should be conducted.

0111-07 REFERENCES

ANL/EVS/R-11/6, 2011, "Phase 1 Characterization Sampling and Analysis Plan for the West Valley Demonstration Project," Revision 1, dated July 13, 2011, ADAMS Accession No. ML11193A252 Pkg.

District Court, Western New York, 2009, Consent Decree No. 06-CV-810, 2009, filed October 27, 2009, also found under key legal documents on DOE's WVDP web site at WV.DOE.gov.

DOE-NRC, 1981, Memorandum of Understanding (MOU) between the DOE and the NRC (Federal Register Notice, Vol. 46, No. 223, page 56960, dated November 19, 1981, ADAMS Accession Nos. ML1110800494.

² Per the DOE-NRC MOU, should an activity be identified by NRC as posing an immediate radiological threat to public health and safety, the NRC's Director, NMSS, will so notify the Department's Project Manager. The Department will promptly review the activity and take appropriate action. The NRC and the Department agree that a high priority will be given such resolutions.

DOE, 2011, Phase 1 Final Status Survey Plan for the West Valley Demonstration Project, dated May 31, 2011, ADAMS Accession No. ML11193A251.

DOE, 2013, M. Maloney Ltr Re: U.S. Nuclear Regulatory Commission on U.S. Department of Energy QP-450-01 Management on Environmental Media- Phase 1 Decommissioning of the West Valley Demonstration Project, dated August 15, 2013, ADAMS Accession No. ML13225A210.

DOE, 2009a, "Phase 1 Decommissioning Plan for the West Valley Demonstration Project, Revision 2," Prepared by Washington Safety Management Solution, URS Washington Division, Science Applications International Corporation, December 18, 2009, ADAMS Accession No. ML100040393.

DOE, 2009b, "Submission of the Phase 1 Final Status Survey Plan for the West Valley Demonstration Project for NRC Review," December 17, 2009, ADAMS Accession No. ML093560393.

DOE, 2010a, "Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center," DOE/EIS-0226, January 2010, ADAMS Accession No. ML090020150.

DOE, 2010b, Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center- A Summary and Guide for Stakeholders, DOE/EIS-0226, Published January 2010.

DOE, 2014, Letter from DOE to NRC Regarding Revision to West Valley Demonstration Project Policy on Management of Environmental Media-Phase 1 Decommissioning (QP-450-01), dated November 25, 2014, ADAMS Accession No. ML14338A559.

DOE, WVDP Annual Environmental Reports found to DOE.WVDP.gov

NRC, 1966, West Valley Provisional Operating License CSF-1 and Technical Specifications, issued April 19, 1966, ADAMS Accession No. ML110820790.

NRC, 1981a, Preliminary Legal Analysis of West Valley Demonstration Project Act, Public Law 96-368 & NRC's New Regulatory Responsibilities, dated January 13, 1981, ADAMS Accession No. ML19297D711 (non-public).

NRC, 1981b, "Licensing Responsibilities of NRC for the West Valley Demonstration Project," with Attachment A, "Public Law 96-368, the "West Valley Demonstration Project Act of 1980," dated February 25, 1981, ADAMS Accession No. ML19219B036 (non-public).

NRC, 1981c, Amendment 31 to License CSF-1, dated September 30, 1981, ADAMS Accession No. ML082550509.

NRC, 1982a, Amendment 32 to License CSF-1, dated February 11, 1982, ADAMS Accession No. ML053000209.

NRC, 1982b, Notification that DOE Assumed Exclusive Possession of Facility on February 25, 1982 per License CSF-1 Paragraph 7 with Certificate of Svc Encl., dated March 1, 1982, ADAMS Accession No. ML20041D356.

NRC, 1997, "10 CFR Part 20, et al., Radiological Criteria for License Termination; Final Rule, "Federal Register, July 21, 1997, 62 FR 39057.

NRC, 2000, NUREG-1575, Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). EPA 402-R-97-016, Rev. 1, DOE/EH-0624, U.S. Department of Defense (DoD), U.S. Department of Energy (DOE), U.S. Environmental Protection Agency (EPA), and NRC, Revision 1, issued August 31, 2000, Washington, D.C., ADAMS Accession No. ML003761445.

NRC, 2001, List of Corrections to Multi-Agency Radiation Survey and Site Investigation Manual, Revision 1, Federal Register Notice, 66 FR 34727, pages 34727-34728 (2 pages).

NRC, 2002, "Decommissioning Criteria for the West Valley Demonstration Project (M-32) at the West Valley Site; Final Policy Statement," February 1, 2002 (67 FR 5003).

NRC, 2003, 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, dated May 15, 2003, ADAMS Accession No. ML031350099.

NRC, 2004, Regulatory Analysis Guidelines of the US Nuclear Regulatory Commission, NUREG/BR-0058, Revision 4, NRC, Washington, DC, September 30, 2004, ADAMS Accession No. ML042820192.

NRC, 2006, NUREG-1757, Consolidated Decommissioning Guidance, Volume 1, Revision 2 and Volume 2, Revision 1, U.S. Nuclear Regulatory Commission, Washington, D.C., September 2006.

NRC, 2009 "Request for Additional Information on Phase 1 Decommissioning Plan for the West Valley Demonstration Project, May 15, 2009, ADAMS Accession No. ML091200456 Pkg.

NRC, 2010a, B. Bower Ltr. RE Technical Evaluation Report on the U.S. Department of Energy Phase 1 Decommissioning Plan for the West Valley Demonstration Project, dated February 25, 2010, ADAMS Accession No. ML100360030 (Pkg).

NRC, 2010b, Technical Evaluation Report on the U.S. Department of Energy Phase 1 Decommissioning Plan for the West Valley Demonstration Project, dated February 25, 2010, ADAMS Accession No. ADAMS Accession No. ML100400099.

NYSERDA, 2004, Issues Raised in NYSERDA November 18, 2003, Letter to John Greeves Concerning NRC's Implementation Plan for West Valley, dated March 9, 2004, ADAMS Accession No. ML040690282 (non-public).

END

Revision History for IMC 0111

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public Information)
NA	NA 12/10/85 CN 85-040	IMC 011, Region I Monitoring Activities for the DOE West Valley Demonstration Project Original issuance.	NA	NA
N/A	ML020710808 03/04/02 CN 02-006	IMC 0111 has been revised (ML020710812) to incorporate organizational and other changes reflecting NRC's current organization and monitoring activities at the West Valley site.	None	NA
N/A	ML20210M356 09/09/20 CN 20-041	Is revised to highlight unique interactions at the site and commitments made by the U.S. Department of Energy and the Licensee since the document was last updated, identify that an export controlled information review is needed before releasing licensing basis and safety basis information, and reference key documents that were developed since the last update to the IMC.	None	ML20217L206