

WEST VALLEY DEMONSTRATION PROJECT  
MEMORANDUM OF UNDERSTANDING  
BETWEEN THE  
U.S. DEPARTMENT OF ENERGY  
AND THE  
U.S. NUCLEAR REGULATORY COMMISSION

MEMORANDUM OF UNDERSTANDING  
WEST VALLEY DEMONSTRATION PROJECT

I. Purpose and Scope

This Agreement, mandated by the West Valley Demonstration Project Act of 1980, (the Act), Pub. L. No. 96-368, establishes procedures for review and consultation by the U.S. Nuclear Regulatory Commission (NRC) with respect to activities conducted at the Western New York Nuclear Service Center, West Valley, New York (the Center) by the U.S. Department of Energy (the Department) under the Act. This agreement encompasses those development, design, construction, operation, and decontamination and decommissioning activities that are associated with the project as described in the Act.

II. Responsibilities of Parties

A. Department of Energy

1. The Act directs the Department to carry out a high-level radioactive waste management demonstration project (the project) at the Center. Under the Act, the Department is responsible for demonstrating the solidification and preparation of the liquid high-level radioactive wastes stored at the Center in a form suitable for transportation and disposal. The Department has responsibility for the public health and safety associated with this project. The Department agrees to provide the NRC information required to identify any potential radiological danger to public health and safety and to provide access to the Center to

NRC for the monitoring of project activities to further assure the public health and safety from a radiological standpoint.

2. The Department's Deputy Assistant Secretary for Nuclear Waste Management and Fuel Cycle Programs, or his successor, is responsible for ensuring the implementation of the terms of this Agreement. The Department's West Valley Project Manager (Project Manager) will be the Department's point of contact for all communications relating to carrying out the provisions of this Agreement. The Department's Project Manager will coordinate all interactions with the NRC and, on a timely basis, provide the NRC the information, reports, and access as provided in this Agreement. The Department's Project Manager will consult with the NRC on matters within the scope of this Agreement. This consultation includes the exchange of information and opinion, in person, and in writing, between personnel of both the Department and the NRC.

B. Nuclear Regulatory Commission

1. The Act requires that the Department enter into an agreement with the NRC to establish arrangements for review and consultation by the NRC with respect to the project. The review and consultation shall be conducted informally and, in accordance with the Act, shall not be subject to formal Commission procedures or actions required by law for licensed activities. The NRC review, consultation, and monitoring established by this Agreement will provide the Department with independent analyses

to assist the Department in fulfilling its responsibility for public health and safety. The NRC has the responsibility to carefully review, critique, and analyze, in a timely manner, the information provided to identify to the Department any potential radiological danger to the public health and safety which may be presented by the project.

2. The NRC's Director of Nuclear Material Safety and Safeguards (NMSS), or his successor, is responsible for ensuring the implementation of the terms of this Agreement. The NRC's West Valley Project Manager (Project Manager) will be the NRC point of contact for all communications relating to carrying out the provisions of this Agreement. NMSS, or any office to whom its functions may be transferred, is responsible for reviewing, consulting with respect to, and commenting upon project activities to identify any potential radiological danger to the public health and safety. The NRC's Project Manager will receive and coordinate the review of project information submitted by the Department. The NRC's Project Manager will provide the Department with comments as appropriate or required by this Agreement. The NRC's Project Manager will consult with the Department on matters within the scope of this Agreement. This consultation includes the exchange of information, opinion and advice, in person and in writing, between personnel of both the Department and the NRC.

### III. Agreements Between Parties

#### A. General Provisions

1. The purpose of this Agreement is to promote the timely and orderly completion of the project mandated by the Act with due regard for the public health and safety. Essential to this timely and orderly completion is a relationship between the agencies marked by open and candid communications at all levels and prompt resolution of any issues which may arise.
2. Insofar as practicable, the NRC agrees to receive and use information and reports developed in the course of the Department's routine operations, and in accordance with Department administrative rules, regulations, procedures and orders which apply to its management and control of the project. The Department will, however, provide the NRC such additional information as the NRC may require to identify any potential radiological danger to the public health and safety which may be presented by the project. To the extent not subject to the exemptions contained in 5 USC § 552(b), information or reports required under this agreement to be submitted by the Department to the NRC, for review and any comments provided by the NRC to the Department in response thereto, shall be available for public inspection.
3. NRC comments resulting from its review and consultation will be discussed between the respective Project Managers and confirmed in writing. The Department will inform the NRC in writing of the disposition of such comments upon NRC's request.

4. 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.
5. The Department will transport, in accordance with applicable provisions of law, the waste solidified at the Center to an appropriate Federal repository for permanent disposal.
6. The Department will, in accordance with applicable licensing requirements, dispose of low level radioactive and transuranic waste produced by the solidification of the liquid high-level waste under the project.
7. For those portions of the Center in the possession of the Department which are not used in connection with the project, the Department will provide the Commission information to identify any potential radiological danger to the public health and safety and access to monitor the activities.
8. To the extent that detailed working procedures are necessary to implement the provisions of the Act and of this Agreement, the Department and the NRC agree to establish such procedures by the exchange of letters between the Department's Project Manager and the NRC's Chief, Advanced Fuel and Spent Fuel Licensing Branch, or his successor.

9. If an issue should arise which cannot be promptly resolved between Project Managers, the NRC and the Department agree to refer the matter to appropriate management levels for resolution.
10. Nothing in this Agreement shall derogate from the statutory authority of the Department or the NRC.

B. Specific Provisions

1. Waste Solidification, Disposal, and Decontamination Plan (the Project Plan)

- a. The Department will submit to the NRC, for review and comment, a plan for the solidification of the high-level waste at the Center, the removal of the waste for purposes of its solidification, the preparation of the waste for disposal, and the decontamination of the facilities used in solidifying the waste.

Before the submission of the plan, the Department may consult with the NRC, in person or in writing, with respect to the development of such plan or any issues that may be presented by it, including decisions which the Department proposes to make in accordance with the process contemplated by the National Environmental Policy Act. NRC will respond to a Department request for such consultation, in person or in writing, as the case may be.

- b. The Project Plan will contain the level of detail generally associated with conceptual design of structures, systems and

components. As the project continues and more precise information is developed, that information will be submitted to the NRC prior to the beginning of project activities for which the information is relevant.

- c. The Project Plan will be submitted as soon as practicable prior to major construction or modification of structures, systems and components at the project facilities. The Project Plan will discuss the Department's approach for the conduct of the project by describing what is going to be done and how it will be accomplished, and will include:
- (1) A description of what is to be developed, constructed, or used including the major systems or elements of the project and facilities, whether existing, modified, or new.
  - (2) A description of the status of technology for implementing the project including a description of any ongoing or planned supporting development work upon which the project is dependent.
  - (3) A description of the specific scientific, technological, or engineering approaches or processes to be used in meeting the project objectives.
  - (4) A preliminary project schedule and a description of each phase of the project including the work to be

accomplished and products developed, including major project events, technical activities, and decision points.

- d. Upon submission of the Project Plan to the NRC, the Department will publish in the Federal Register a notice of the submission and of the plan's availability for public inspection.
- e. The NRC will review the Plan and provide written comments to the Department. In preparing its comments, the NRC will specify with precision its objection to any provision of the plan.
- f. Upon receipt of Commission comments, the Department will publish in the Federal Register a notice of receipt and of the availability of the comments for public inspection.
- g. If the Department does not revise the plan to meet objections specified in the Commission's comments, the Department will so notify the Commission and publish in the Federal Register a detailed statement for not so revising the plan.
- h. The Department will inform the Commission of significant changes in the plan as the project proceeds.

2. Waste Form and Containers

- a. The Department will consult with the NRC with respect to the form in which the high-level radioactive waste at the

Center will be solidified and with respect to the containers to be used in the permanent disposal of this waste.

- b. As the basis for this consultation, the Department will provide the NRC a description and an analysis of the extent to which the final waste form and container complies with any NRC technical regulations (or proposed regulations) regarding disposal of high-level radioactive waste in geologic repositories.
- c. Upon receipt the NRC will review the information and provide written comments and recommendations to the Department. As a basis for its comments and recommendations, the NRC will use any technical criteria issued with respect to the waste form and containers that may be emplaced in geologic repositories that are subject to the licensing jurisdiction of the NRC.

3. Safety Analysis Reports and Other Information

- a. Before substantial construction or modification of structures, systems or components, the Department will prepare a safety analysis report (SAR) that will assure that: (1) potential hazards are systematically identified; (2) potential impacts are analyzed; and (3) reasonable measures to eliminate, control or mitigate the hazards have been taken. The Department will submit the SAR to the NRC for independent review. The SAR will contain design descriptions, safety operating limits, and minimum conditions for operation.

The safety analysis will address in appropriate detail the following topics: (1) a description and evaluation of the project facilities and processes; (2) design criteria for systems, components, and structures; (3) normal and emergency operating procedures to be used; (4) identification of hazards; (5) physical design features and administrative controls provided to prevent or mitigate potential accidents; (6) potential accidents and consequences including those resulting from natural phenomena; (7) operational limitations; and (8) means for controlling effluents and minimizing radiation exposures.

A quality assurance plan and a safeguards and security plan will be prepared by the Department and provided to the NRC with the SAR or in advance of the SAR if they are available earlier.

- b. Before solidification of the waste, the Department will provide to the NRC information updating the SAR which will describe the project facilities as actually constructed or modified where such construction or modification does not conform to the description contained in the SAR. The SAR updates will address changes in design, safety operating limits, and minimum conditions for operation and will be similar in form to the SAR.

4. Decontamination and Decommissioning

- a. The Department will perform an analysis of impacts and risks of potential disposition modes for the tanks and other facilities of the Center in which the high-level radioactive waste solidified under the project was stored, and facilities, material, and hardware used in connection with the project. The NRC and Department project managers will consult on requirements and disposition modes to be analyzed.
- b. Upon receipt of the Department analysis, the NRC will prescribe decontamination and decommissioning (D&D) requirements in accordance with the Act.
- c. The Department will prepare a Project Decommissioning Plan which includes a description of engineering and operating activities to be performed. This plan will be reviewed by the NRC and comments provided to the Department. The Department will review and consider the comments provided prior to initiation of D&D operations.
- d. The Department will prepare a Site Status Report. The report will provide:
  - 1) a statement of the D&D requirements prescribed by NRC and an analysis of the extent to which such requirements have been satisfied for those portions of the Center required to be decontaminated and decommissioned by the Act; and

- 2) a description of those portions of the Center in the possession of the Department with particular reference to physical and radiological conditions.

5. Monitoring

- a. The Department will afford the NRC such access as necessary to monitor project activities to further assure the public health and safety. The NRC will use the descriptions, operating limits, minimum conditions, and technical specifications included in the SAR as the criteria for conduct of its monitoring program.

The monitoring results will be discussed between the respective Project Managers and provided to the Department in the form of a written monitoring report. The Department will inform the NRC in writing of the disposition of such comments upon NRC's request.

- b. Records Examination

For the purposes of further assuring the public health and safety, the Department will make available to the NRC for examination and copying, upon reasonable notice, records kept by the Department pertaining to the project.

IV. Effective Date

This agreement shall take effect upon the signing by the Deputy Assistant Secretary for Nuclear Waste Management and Fuel Cycle Programs of the

U.S. Department of Energy, and the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, and shall continue in effect until revised by mutual agreement unless terminated by either party, for good cause, upon 120 days notice in writing.

For the United States Department of Energy

Sheldon Meyers

Sept 22, \_\_\_\_\_, 1981

For the United States Nuclear Regulatory Commission

James J. [Signature]

Sept 23 \_\_\_\_\_, 1981