

[DOE LETTERHEAD]

January 9, 1997

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W., Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

Enclosed is the "Guidance for Complying with DOE Order 5820.2A, *Radioactive Waste Management*, for Onsite Management and Disposal of Low-Level Waste (LLW) Resulting from Environmental Restoration Activities." This document is a deliverable pursuant to the commitment in Task Initiative VI.B.3 identified in the Department of Energy's Implementation Plan, Revision I, for the Defense Nuclear Facilities Safety Board Recommendation 94-2.

The purpose of this document is to clarify how the Department complies with the requirements of DOE Order 5820.2A, *Radioactive Waste Management*, at sites managing and disposing of low-level waste resulting from environmental restoration activities at onsite disposal facilities. This document applies to sites undergoing environmental restoration pursuant to regulatory authorities such as the Comprehensive Environmental Response, Compensation, and Liability Act, Resource Conservation and Recovery Act, Atomic Energy Act and applicable State regulations. This document serves as a companion to the policy titled "Policy for Demonstrating Compliance with DOE Order 5820.2A for Onsite Management and Disposal of LLW Under CERCLA," which was transmitted to the Board in May 1996.

The Department has completed the actions identified under this commitment and proposes closure of the commitment.

Sincerely,

Alvin L. Alm
Assistant Secretary for Environmental Management

Enclosure

cc: M. Whitaker, S-3.1

GUIDANCE FOR COMPLYING WITH DOE ORDER 5820.2A, *RADIOACTIVE WASTE MANAGEMENT*, FOR ONSITE MANAGEMENT AND DISPOSAL OF LOW-LEVEL WASTE (LLW) RESULTING FROM ENVIRONMENTAL RESTORATION ACTIVITIES

Purpose

The purpose of this document is to clarify how the Department of Energy (DOE) complies, and will continue to comply, with the substantive and procedural requirements of DOE Order 5820.2A, *Radioactive Waste Management*, for onsite management and disposal of low-level waste resulting from environmental restoration activities. This document applies to sites undergoing environmental restoration (including decommissioning) pursuant to regulatory authorities including, but not necessarily limited to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), the Atomic Energy Act (AEA), and applicable state requirements. Management and disposal of environmental restoration LLW at offsite DOE disposal facilities shall be conducted under both the substantive and procedural requirements of DOE Order 5820.2A. Disposal of LLW at commercial facilities shall be in accordance with applicable regulatory requirements.

As a part of implementing Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-2, *Conformance with Safety Standards at Department of Energy Low-Level Nuclear Waste and Disposal Sites*, DOE committed to develop policy and guidance defining the applicability of DOE Order 5820.2A to the onsite management and disposal of LLW (which includes mixed low-level waste for purposes of this guidance) resulting from environmental restoration activities (Task VI.B.3 in DOE's Implementation Plan).

The commitment for developing policy and guidance specifically included environmental restoration activities conducted pursuant to CERCLA and RCRA, and would apply during the interim until DOE Order 5820.2A is revised, at which time key components will be incorporated into its revision, DOE Order 435.1. The goal of this commitment is to: 1) avoid duplication of effort and address any Environmental Protection Agency (EPA) or state regulatory concerns where federal/state regulations and DOE requirements may overlap, and 2) enable DOE to better meet its goals of ensuring managerial and financial control and fulfilling enforceable milestones.

Regulatory Authority at Environmental Restoration Sites

DOE authority for responding to releases or potential releases of radionuclides to the environment, and for the onsite management and disposal of the radioactive content of LLW resulting from environmental restoration activities (including decommissioning) is derived from:

- The AEA as implemented through DOE directives (e.g., DOE Order 5820.2A, *Radioactive Waste Management*, and DOE Order 5400.5, *Radiation Protection of the Public and the Environment* (to be codified at 10 CFR Part 834)); and
- CERCLA (e.g., Sections 104 and 120) as delegated in Executive Order 12580, *Superfund Implementation*. These responsibilities and requirements are coordinated with and regulated by the

EPA and state authorities, primarily under interagency agreements.

RCRA does not provide any authority or responsibilities for management and disposal of the radioactive content of LLW as the statute and its implementing regulations [40 CFR 261.4(a)(4)] specifically exclude source, special nuclear, or by-product material as defined by the AEA. However, in the course of environmental restoration activities, LLW may be generated or need to be disposed at sites whose environmental management activities are largely regulated by RCRA. Therefore, for onsite disposal facilities in which environmental restoration wastes containing LLW are to be disposed at these sites, additional appropriate statutory authority (i.e., AEA or CERCLA) needs to be applied to ensure protection of human health and the environment from all constituents (including radionuclides) and pathways of concern.

Onsite Management and Disposal of Environmental Restoration LLW at CERCLA Sites

Based on the authority and structure of the CERCLA process and the National Contingency Plan [NCP (40 CFR Part 300)], DOE has instituted a policy [*Policy for Demonstrating Compliance With DOE Order 5820.2A for Onsite Management and Disposal of Low-Level Waste Under the Comprehensive Environmental Response, Compensation, and Liability Act*, May 31, 1996 (attached and hereinafter referred to as the CERCLA/5820.2A Policy)] that the CERCLA process may, to the extent practical, be used to demonstrate compliance with the requirements of DOE Order 5820.2A with regard to the safe onsite management and disposal of environmental restoration LLW at CERCLA sites. CERCLA sites to which the CERCLA/5820.2A Policy applies are sites having or planning for onsite management and disposal of LLW resulting from environmental restoration activities (including decommissioning), and which:

1. As a matter of course, are subject to CERCLA either because they are listed on the National Priorities List (NPL) or the regulatory structure established in cleanup strategies (e.g., negotiated agreements) is based on CERCLA authority and procedures, and
2. Would otherwise also comply with the procedural requirements, in addition to the substantive requirements, of DOE Order 5820.2A.

Onsite Management and Disposal of Environmental Restoration LLW at Non-CERCLA Sites

This section applies to non-CERCLA sites planning for onsite management and disposal of LLW resulting from environmental restoration activities (including decommissioning) which are otherwise subject to the procedural requirements, in addition to the substantive requirements, of DOE Order 5820.2A. Non-CERCLA sites, for purposes of this document, are sites undergoing cleanup pursuant to regulatory authorities other than CERCLA. The various regulatory authorities under which these sites perform cleanup include, but are not necessarily limited to, RCRA, applicable state requirements, and the AEA.

The existing and continuing practice for onsite management and disposal of LLW from environmental restoration activities at non-CERCLA sites is as follows:

1. Non-CERCLA sites comply with the requirements derived from the AEA and implemented through applicable DOE directives including DOE Order 5820.2A, *Radioactive Waste Management*, for the onsite management and disposal of LLW from environmental restoration activities (including decommissioning); or
2. Non-CERCLA sites may, in accordance with CERCLA, take response actions (i.e., removal actions or remedial actions) for the onsite management and disposal of LLW resulting from environmental restoration activities (including decommissioning).¹ In doing so, such sites may follow the CERCLA/5820.2A Policy to demonstrate compliance with DOE Order 5820.2A with regard to the safe onsite management and disposal of environmental restoration LLW. When utilizing CERCLA and the

CERCLA/5820.2A Policy at non-CERCLA sites, responsible DOE elements shall act consistent with:

- a. The NCP as promulgated in 40 CFR Part 300, including ensuring adherence to the requirements for public participation and regulatory agency involvement. This may involve, depending on site specific circumstances: i) developing or revising cleanup agreements, memoranda of understanding, etc., with the EPA or state regulatory agencies, or otherwise conducting LLW management and disposal activities in comity with these regulatory agencies, and ii) public notification and meetings, with consideration of public and regulatory comments;² and
- b. The attached CERCLA/5820.2A Policy, which includes: i) developing a CERCLA/ 5820.2A Roadmap to demonstrate how the DOE Order 5820.2A requirements are satisfied through the CERCLA process, and ii) submitting a letter to the Deputy Assistant Secretary for Environmental Restoration certifying compliance with the policy and that the substantive requirements of DOE Order 5820.2A have been met through application of the CERCLA process.

In all cases, however, sites should act in a manner consistent with the *Guidance for a Composite Analysis of the Impact of Interacting Source Terms on the Radiological Protection of the Public from LLW Disposal Facilities*, April 30, 1996. This guidance (developed pursuant to Task VII.B.2 in DOE's Implementation Plan responding to DNFSB Recommendation 94-2) establishes a consistent approach to ensure protection of human health and the environment from all interacting radiological sources including the LLW disposal facility source term.

¹Under Executive Order 12580, *Superfund Implementation*, DOE is the lead agency for responding to a release or threatened release of hazardous substances, including radionuclides, from any facility or vessel under the jurisdiction, custody, or control of DOE. As such, DOE has the authority to take appropriate response actions in accordance with CERCLA at sites not listed on the NPL. Response actions, consisting of removal actions (40 CFR 300.415) or remedial actions (40 CFR 300.430 and 300.435), may include onsite disposal, no action, or other appropriate and feasible actions which ensure protection of human health and the environment.

²If based on EPA or state agency decisions, external regulatory oversight is not provided through the CERCLA process for the onsite management and disposal of LLW resulting from environmental restoration activities, then responsible DOE elements would follow the requirements of DOE Order 5820.2A for review and approval to ensure protection of human health and the environment.