



Department of Energy

Washington, DC 20585

September 25, 1995

Dr. George W. Cunningham
Technical Director
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D.C. 20004

Dear Dr. Cunningham:

In anticipation of a briefing to be scheduled in the near future by our Office of Program Integration, enclosed is a draft memorandum for your information. The draft memorandum was prepared by my staff in response to an April 17, 1995, request from the Fernald Field Office for approval of an approach to integrate the substantive Performance Assessment requirements for Low-Level Waste disposal as outlined in Chapter III of the Department of Energy Order 5820.2A with the technical and procedural requirements of the Comprehensive Environmental Response, Compensation, and Liability Act process, including the application of "Applicable, Relevant, or Appropriate Requirements" to the extent required by the National Contingency Plan.

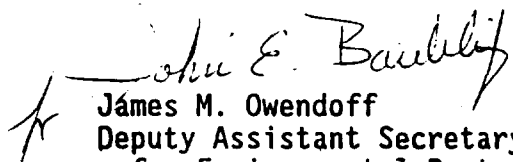
We have discussed this proposed approach with the Offices of General Counsel, Environmental Policy and Support, Environmental Activities, and Waste Management Program Integration to gain their understanding of the proposed Fernald approach. Those Offices generally support the proposal and are in the process of identifying specific actions and issues which require resolution to allow us to move forward. However, the Office of General Counsel brought to our attention that the proposed approach appeared to be inconsistent with views expressed by Defense Nuclear Facilities Safety Board (DNFSB) staff in their most recent review of draft DOE Order 5820.2B.

This information is intended to facilitate early and open communication between the Department of Energy (DOE) and the DNFSB regarding this approach as it impacts other activities ongoing at DOE, such as response to DNFSB Recommendation 94-2. In addition, the information provides the DNFSB staff with current technical and program information regarding health and safety aspects of selected programs/activities at Fernald.



If you or your staff have any questions regarding the enclosed draft memorandum, please contact Lili Griffin of my staff at (301) 903-2921. For questions regarding this letter, please contact Robert Fleming of my staff at (301) 903-7627.

Sincerely,


James M. Owendoff
Deputy Assistant Secretary
for Environmental Restoration

Enclosure

cc:

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G. Roles, EH-412
R. Daily, EH-413
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EM-423 (L. Griffin, 301-903-2921)

Approval of Approach for CERCLA Equivalency to Performance Assessment Requirements under Department of Energy Order 5820.2A, "Radioactive Waste Management"

Jack R. Craig
Director
Fernald Area Office

This letter is in response to the attached April 17, 1995, memorandum, from J. W. Reising which requested approval of an approach being taken at the Fernald Environmental Management Project (FEMP) with regard to the Performance Assessment requirements provided in the Department of Energy (DOE) Order 5820.2A, "Radioactive Waste Management." I understand that your original recommendation was based on a careful review by the Fernald Area Office staff and we approve their recommendation.

Specifically, I approve the approach that the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process can be used to address the performance objectives for Low-Level Waste (LLW) disposal as outlined in Chapter III of DOE Order 5820.2A because the technical requirements will be met through the CERCLA process, including the application of "Applicable, Relevant, or Appropriate Requirements" (ARARs) to the extent required by the National Contingency Plan (NCP). A Performance Assessment (PA), as required by DOE Order 5820.2A for LLW disposal facilities is not necessary. CERCLA is not used to develop technical requirements but uses standards established under other statutory authorities as ARARs or To-Be-Considered (TBC) for CERCLA remedial actions. CERCLA, ARARs, and TBCs include Federal, State, and local environmental protection standards, criteria, or limits. TBCs include nonpromulgated criteria (e.g., advisories and guidance) issued by Federal agencies or States. TBCs can be used to further define an ARAR or to address the situation at the site if no ARARs exist. Once a TBC becomes part of a Record of Decision, the TBC, like an ARAR, becomes a legally binding requirement under CERCLA.

As you indicated, it is essential that resolution of this issue not become a critical path to disposal of material on site within our CERCLA-driven schedule. It is, however, important to recognize that DOE has a unique role as a Federal agency and is responsible for management of nuclear materials at its facilities and for developing its own set of Orders in carrying out its statutory responsibilities under the Atomic Energy Act (AEA). The U.S. Environmental Protection Agency's (EPA) ARARs Guidance, CERCLA Compliance with Other Laws Manual, recognizes DOE's unique role. The manual states that "most of DOE's operations are exempt from NRC's licensing and regulatory requirements" and DOE's requirements for "radioactive waste management are spelled out in a series of internal DOE Orders...issued under the Atomic Energy Act [that] have the same force for DOE facilities or 'within DOE' as does a regulation." Therefore, Fernald

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should always incorporate by reference technical requirements of the DOE Order 5820.2A in CERCLA documentation to the extent required by CERCLA and the NCP. The selection of technical requirements in DOE Order 5820.2A has been based on the site-specific circumstances and best professional judgement given that CERCLA and the AEA regulatory requirements are not entirely compatible (e.g., future land use).

Upon review, we found that the CERCLA approach will protect public health and the environment, given the objectives and intent of CERCLA and the NCP. In addition, LLW vulnerabilities may be identified as part of the LLW complex-wide review being conducted as part of the Defense Nuclear Facilities Safety Board Recommendation 94-2, "Conformance with Safety Standards at DOE Low-Level Nuclear Waste and Disposal Sites."

As part of our evaluation for approval, we coordinated this issue with the Offices of General Counsel (GC-51), Environmental Policy and Support (EH-412), Environmental Activities (EM-22), Waste Management Program Integration (EM-33), and Environmental Restoration Program Integration (EM-43) to ensure that the proposal would not create a departmental vulnerability.

Counsel within the DOE organization and outside of DOE presented other additional reasons to support the approval of Fernald's approach:

- This approach complies with provisions in the Fernald 1991 Amended Consent Agreement, CERCLA Section 121(e)(1), and the NCP that stipulate that portions of response actions conducted entirely on the site are exempted from procedural requirements for obtaining Federal, State, or local permits. The ARARs process is used to incorporate the "substantive" or technical content of Federal, State, and local permitting requirements. EPA and State authorities will likely object to DOE imposing procedural requirements for activities that should be exempted under CERCLA 121(e)(1).
- This approach is consistent with the CERCLA approach used at the NRC Agreement State site, Maxey Flats, which also involved construction of an on-site LLW disposal cell. The Kentucky licensing and disposal requirements were incorporated as ARARs in the final Record of Decision.
- This approach is consistent with DOE efforts to streamline its activities where possible and minimize costs in light of recent budget reductions. The cost and time impacts of requiring PAs has been estimated to require \$2 million and two years for preparation, review, by EM-30's internal Peer Review Panel, and approval by the Office of Waste Management.
- The on-site disposal cell approval by U.S. EPA and Ohio EPA is contingent on receiving a waiver from Ohio regulations that prohibit the siting of disposal facilities over sole-source aquifers. In order to be granted a waiver, the Fernald Environmental Management Project

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was required to adopt an engineering design for the cell which would, when coupled with existing site geologic conditions, ensure the long-term protection (1,000 years) of human health and the environment which is consistent with the requirements for LLW disposal. In addition, the remedial alternative will be subject to the CERCLA five-year review.

In summary, the approach that Fernald outlined which uses the ARARs process allows for the necessary flexibility to select those requirements most suitable for the site-specific circumstances needed given the complexity associated with the DOE cleanups. On-site disposal of the low-activity large volume material at Fernald is the most cost-effective solution to environmental contamination, which is the result of over 40 years of FEMP operations and disposal practices since the middle 1950s. This approach recognizes that DOE Order 5820.2A requirements are not directly applicable to the circumstances of DOE cleanup because they are meant to be applied at facilities that have been designed, built, and operated from the outset pursuant to their requirements.

Your staff may contact Lili Griffin (301) 903-2921, EM-423, regarding this approval if there are any further concerns.

James M. Owendoff
Acting Deputy Assistant Secretary
for Environmental Restoration

Attachment

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DATE