



OAK RIDGE RESERVATION

Environmental Management

October 8, 1998

Mr. Martin Letourneau
Office of Waste Management (EM-35)
U.S. Department of Energy
Germantown, Md 20874-1290

Dear Mr. Letourneau:

The Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) has reviewed the Draft DOE Order 435.1 "Radioactive Waste Management" and Draft Manual DOE M 435.1 "Radioactive Waste Management Manual" and supplies the attached comments. Recognizing that the formal public comment period expired on September 8, 1998, we appreciate your agreement, per our telephone conversation, that ORREMSSAB comments would be fully incorporated into the review process if supplied by October 10, 1998.

We hope you'll find the comments constructive, and we look forward to receiving a formal response from your office regarding their disposition in the final document.

Sincerely,

William M. Pardue,
Chair

WMP/plo

cc: Marianne Heiskell, DOE/ORO
Margaret Wilson, DOE/ORO
Karol Hazard, DOE/HQ
John Hankinson, USEPA Region 4
Earl Leming, TDEC
Susan Gawarecki, LOC



Comments on Draft DOE Order 435.1 and Draft Manual 435.1 on Radioactive Waste Management

The Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) concurs in general with the intent of draft DOE Order 435.1 and feels that it represents a very positive step toward more responsible waste management within the DOE complex. Overall, the Order seems reasonable. A systems approach is a good idea, although it is not well explained how the Order follows this approach. Following are general and specific comments on the Order and its *Radioactive Waste Management Manual* (DOE M 435.1).

We found six issues of concern or question with the documents:

1. Without being able to review the Implementation Guide specified in the Notice of Availability and Section 6 of the Order, this package cannot be realistically evaluated since details of implementation will be critical to safe operation of waste disposal.
2. Covered storage of low-level waste (LLW) may prove to be extremely costly at the Oak Ridge Reservation without any added benefit if implemented in the strictest sense implied by the Order. Such a requirement should be based on risk estimates for the material and the storage interval under consideration. Consider, for example, lag storage associated with operation of an LLW facility.
3. Placement of wastes in covered and monitored enclosures may prove problematic and costly for our site if DOE-Oak Ridge Operations is unable to ship wastes to disposal facilities due to factors beyond its control.
4. The Order should address whether or not DOE Orders are applicable or relevant and appropriate regulations/requirements (ARARs) in the CERCLA context of this Order.
5. We note that Chapter V of DOE Order 5820.2A on decommissioning was not canceled, as were other chapters. This raises a question regarding its status and relation to 435.1.
6. The Order should address stewardship at waste disposal sites that will require maintenance and surveillance beyond the plausible life of DOE.

Specific comments and questions on the draft *Radioactive Waste Management Manual* (DOE M 435.1) are as follow:

1. **Item 4 of the introduction to the draft manual** states that Order requirements apply to all new and existing DOE radioactive waste management facilities, operations, and activities. Does this include Oak Ridge storage at the East Tennessee Technology Park, the Tumulus Facility at Oak Ridge National Laboratory, and other facilities developed under earlier regulation? The manual goes on to state that the Order must be implemented by the year 2001, or a waiver must be obtained. How would a waiver be justified? Also, does the Order apply to old burial ground wastes in Melton Valley and Bear Creek Valley that were placed in unlined trenches and pits? ORREMSSAB feels that much of this would best be left in place.

2. **Chapter I, Section 1, Items D.4 (Conduct of Operations) and D.13 (Quality Assurance Program):** There is no explicit reference to a "graded approach" except in the "Response to Queries" attachment. Incorporation of these bureaucratically oriented Orders should be accompanied with some statement about the expectation of a risk-based, graded management approach. Otherwise, this Order is likely to be administrated inefficiently.
3. **Chapter I, Section 2, Item E.1 (Site-Wide Radioactive Waste Management Programs):** Does this mean a new complex-wide plan must be developed for mixed waste? What are the implications?
4. **Chapter I, Section 2, Item E.4 (Use of Non-DOE Facilities):** DOE is now performing an analysis of whether non-DOE disposal capacity should be expanded or restricted per the Notice of Availability. We are not sure this should or can be a DOE decision; if commercial interests feel this is a viable business and can obtain state or Nuclear Regulatory Commission licenses, they should be allowed to do so. DOE should generally plan to use these facilities unless they imply higher total costs, higher total risks (including transportation), or have questionable long-term reliability.
5. **Chapter I, Section 2, Item E.5 (Environmental Restoration, Decommissioning, and Other Cleanup Waste):** The existence of two approaches to assess the impacts or risks of a waste disposal cell leads to confusion. ORREMSSAB supports the use of performance assessments to assess the risk of disposal sites and the establishment of waste acceptance criteria. If it appears that regulatory agencies also require a CERCLA risk assessment, there is needless duplication of effort. ORREMSSAB believes that one or the other approach, but not both, should be required. Wording for this item is unclear and should be rewritten.
6. **Chapter I, Section 2, Item E.12 [As Low As Reasonably Achievable (ALARA)]:** This item should contain a reference, perhaps to the DOE Order 5400.5 section, that says what ALARA means.
7. **Chapter IV, Item C (Complex-Wide LLW Management Program):** Does this section require a new plan to be developed by DOE?
8. **Chapter IV, Item G.1.d.1 (Technical and Administrative Waste Acceptance):** Does this section require compaction of Oak Ridge or other LLW prior to disposal?
9. **Chapter IV, Item M.1.c (Site Evaluation):** This section could be interpreted to preclude any waste disposal site in Tennessee on the grounds of erosion. To give practical meaning to this section, some rough quantitative measure of suitability is needed. Also, if these conditions make it difficult to site disposal facilities elsewhere at potential out-of-state locations, it will impact negatively on sites intending to ship wastes to those locations.
10. **Chapter IV, Item M.2 (LLW Treatment and Storage Facility Design):** Is Oak Ridge required to meet all these criteria for LLW currently in storage?
11. **Chapter IV, Item N.1 (Storage):** Does this mean all LLW in storage must be shipped from Oak Ridge in 1 year, even if an authorized and willing disposal site is unavailable?
12. **Chapter IV, Item O (Treatment):** What are the implications of this section for LLW in the proposed Oak Ridge on-site waste cell?