



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

March 20, 2001

Mr. Rod Nelson
Assistant Manager for Environmental Management
DOE/Oak Ridge Operations
P.O. Box 2001 EM90
Oak Ridge, TN 37831

Attainment Plan for Risk/Toxicity-Based Waste Acceptance Criteria at the Oak Ridge Reservation, Oak Ridge, Tennessee (DOE/OR/01-1909&D1)

Dear Mr. Nelson:

The Oak Ridge Site Specific Advisory Board, at its March 14, 2001 meeting, approved the enclosed recommendations on the *Attainment Plan for Risk/Toxicity-Based Waste Acceptance Criteria at the Oak Ridge Reservation* submitted for approval by the Waste Management Committee.

The Board is making recommendations on three key issues regarding the Attainment Plan. We are also requesting additional information for each recommendation in order to better understand the complex concepts and issues concerning the waste acceptance criteria for the Environmental Management Waste Management Facility.

Also enclosed is supporting information for the recommendations that was developed for SSAB members and the public to have an understanding of the Attainment Plan.

Sincerely,

Luther V. Gibson, Jr.
Chair

Enclosures

Cc: Bill Cahill, DOE/ORO
Pat Halsey, DOE/ORO
Connie Jones, EPA Region 4
John Owsley, TDEC



Oak Ridge Site Specific Advisory Board
Recommendations on the
Attainment Plan for Risk/Toxicity-Based
Waste Acceptance Criteria at the Oak Ridge Reservation,
Oak Ridge, Tennessee (DOE/OR/01-1909&D1)

The Oak Ridge Site Specific Advisory Board (ORSSAB) has identified three key issues of potential public interest regarding the Attainment Plan: (1) planning assumptions, (2) sum of fractions methodology, and (3) roles and responsibilities for setting waste acceptance criteria (WAC) and ensuring WAC attainment. Following are recommendations developed for each of the three key issues plus “information needs” that the Board requests DOE fulfill and make available to the SSAB and the public so they may better understand the complex concepts and issues concerning the WAC.

1. Reasonableness of Planning Assumptions Used in Establishing WACs

Recommendations

- DOE is not anticipating any levels of enriched uranium in the Environmental Management Waste Management Facility (EMWMF) high enough to raise nuclear criticality safety concerns because the WAC limit that potential. However, the acceptance of classified wastes into the EMWMF necessitates addressing this issue, and the Board recommends that a chapter be added to the plan to discuss the issue of potential criticality.
- Redundant hard copy lists of materials disposed in the EMWMF will be maintained in the same manner as other Comprehensive Environmental Response, Compensation, and Liability Act documentation on the Oak Ridge Reservation. The Board recommends that this procedure be noted in the WAC Attainment Plan.
- DOE needs to develop clear and readily understandable public information that explains how analytic WAC are calculated and how key assumptions were selected.

Information Needs

- A better understanding of the original conservatism of assumptions used in determining the WAC
- A detailed description and examples of the degree of credit being sought by DOE for treated waste and how that impacts the original conservatism of assumptions
- A clear understanding of which WACs are final and which WACs are yet to be developed (i.e., blanks in Appendix A)
- An understanding of how future WACs will be determined in each of the WAC categories (explain process in Appendix B and how key assumptions are determined)

- An explanation of specific plans for public involvement in setting future WAC
- An explanation of how the physical location of waste placement in EMWMF affects facility performance and how this is being considered in terms of order of waste streams being sent to EMWMF
- A copy of the Disposal Authorization Statement for the EMWMF and any associated guidance or clarifying information

2. Reasonableness of the Sum of Fractions Approach to Calculating WAC Attainment

Recommendations

- DOE needs to develop clear and readily understandable public information that explains the sum of fractions approach and how it will be implemented.

Information Needs

- A clearly written description of the sum of fractions approach and how it will be implemented
- An explanation of how DOE will make assumptions regarding future waste loading to determine acceptance of waste exceeding the sum of fractions limit (describe the level of confidence in Appendix D information)
- A description of procedures for establishing partitioning coefficients (Kd values)
- An explanation of whether or not credit is being taken for any contaminants assumed to subsequently leave the facility (i.e., through leachate)
- An explanation of how extremely high concentrations of individual contaminants within a waste stream will be handled (i.e., will there be any upper limits on what will be accepted within the sum of fractions approach?)

3. Reasonableness of the Division of Responsibilities and Accountability for Setting WAC and Ensuring WAC Attainment

Recommendations

- DOE needs to develop clear and readily understandable public information that explains the roles and responsibilities of all parties and how the disposal facility will be operated and compliance with WAC assured.

Information Needs

- A walk-through of a typical waste placement scenario and explanation of each role as the process proceeds, focusing on where authority for making key waste disposal decisions lies
- A discussion of who will decide the composition of the WAC Attainment Board and how DOE and management-and-integration contractor roles will work
- An explanation of what level of oversight and audit will be performed by the regulators of the WAC Attainment Board and other WAC attainment activities