



Recommendation No. 103

November 16, 1999

Waste Management Programmatic Environmental Impact Statement Orphan Waste

Background

The Waste Management Programmatic Environmental Impact Statement (WM PEIS) was published in May 1997 (Ref. 1) to give direction to the management and disposal of all of the Department of Energy (DOE) radioactive and mixed wastes. Records of Decision (RODs) have been issued (i.e., high-level and transuranic wastes), or are being developed on individual waste streams (low-level wastes and mixed low-level wastes). Publication of the ROD for low-level waste was planned for May 1999, but it has not yet been released by DOE-Headquarters; it is currently scheduled to be published during December 1999.

The CAB provided input to the WM PEIS (Ref. 2) and has stressed cost effective use of all of the DOE facilities for waste management under the Environmental Management Integration Plan (Refs. 3 and 4). Specific input has been provided for Low Level and Mixed Low Level waste (Ref. 5) and High Level Waste (Ref. 6).

However, there is a category of low level waste at the Savannah River Site (SRS) which has no treatment path specified; it is known colloquially as "orphan" waste. This category consists of several different waste streams that can not meet the Waste Acceptance Criteria (WAC) for disposal at the SRS E-Area low level waste disposal facility, nor do they have a final disposition yet designated. These waste forms are: tritium contaminated debris (equipment and piping); reactor deionizer vessels containing resin contaminated with carbon-14; and ion exchange resins and carbon filter media contaminated with iodine-129. Although it may be possible to develop waste forms that will make some or all of the waste acceptable for disposal at SRS, the most practicable, cost-effective, and equitable method of disposal would be to ship these wastes to a Western disposal facility such as the Nevada Test Site.

Recommendation

The Savannah River Site Citizens Advisory Board recommends that the Department of Energy:

1. Request that DOE-Headquarters publish the Waste Management Programmatic Environmental Impact Statement Record of Decision on low level waste by December, 1999 per the current DOE schedule (this ROD and the remaining ROD are currently over 7 months behind schedule).
2. Request that DOE-Headquarters publish the Waste Management Programmatic Environmental Impact Statement Record of Decision for its remaining waste streams by December 1999, per the current DOE schedule (Mixed Low-Level Waste Disposal and Low Level Waste Disposal). When issued, this ROD needs to include the ability of SRS to ship low-level waste to a Western facility for disposal if the waste cannot be disposed of at SRS.
3. Provide to the Board by March 10, 2000, the estimated plan and scope of work that meets the SRS Waste Acceptance Criteria (WAC) to dispose of the orphan wastes at SRS.
4. Provided that the costs or WAC and regulatory requirements in item 3 above do not justify disposal at SRS, as part of the negotiations on equity considerations for incineration at SRS (see recommendation #2 in the CAB motion "Hazardous Waste Combustors Clean Air Act, SRS Consolidated Incinerator Facility", November 16, 1999), negotiate with stakeholders, SRS regulators, and other DOE sites in order to ship the SRS orphan waste to a Western facility for final disposition.
5. Provide the CAB a schedule for a draft plan that describes an equity position that DOE expects to propose to stakeholders (including LLW, MLLW, TRU, SNF, HLW and Nuclear Materials) by February 15, 2000.

References

1. Final Waste Management Programmatic Environmental Impact Statement, US Department of

- Energy Office of Environmental Management Report DOE/EIS-0200-F, May 1997.
2. Waste Management Programmatic Environmental Impact Statement, Savannah River Site Citizens Advisory Board Recommendation 16, January 23, 1996.
 3. Environmental Management Integration - DOE Headquarters, Savannah River Site Citizens Advisory Board Recommendation 48, November 18, 1997.
 4. Environmental Management Integration - HLW, Savannah River Site Citizens Advisory Board Recommendation 51, November 18, 1997.
 5. Waste Management Programmatic EIS-Low Level and Mixed Low Level Waste, Savannah River Site Citizens Advisory Board Recommendation 72, November 17, 1998.
 6. Waste Management Programmatic Environmental Impact Statement High Level Waste, Savannah River Site Citizens Advisory Board Recommendation 82, March 23, 1999

Criteria for Closure of this Recommendation

1. Publication of the LLW ROD in December 1999.
2. Publication of the remaining RODs in December 1999.
3. Reaching an equitable decision to permit the disposal of SRS Orphan Wastes at a Western DOE site.

Agency Responses

[*Department of Energy-EM*](#)
[*Department of Energy-SR*](#)