SRS Citizen's Advisory Board

Recommendation No. 72

November 17, 1998

Waste Management Programmatic Environmental Impact Statement

Background:

A Waste Management Programmatic Environmental Impact Statement (WM PEIS)[1] was prepared by DOE Headquarters to help DOE decide on disposal of Low-Level Waste (LLW), Mixed Low-Level Waste (MLLW), and other DOE wastes. Six candidate sites (Hanford, Idaho, Los Alamos, Nevada Test Site, Oak Ridge and Savannah River Site) have the capability to dispose of existing and projected LLW to be generated for the next 20 years. Hanford, the Nevada Test Site and SRS are being considered for disposal of MLLW. DOE is reviewing the alternatives analyzed in the WM PEIS using the criteria of: mission compatibility; existing site capabilities; minimizing environmental, health, safety, and transportation impacts; reducing costs, and ensuring regulatory compliance. Input from states, tribes and other stakeholders is being sought. The preferred alternative is to be published in the Federal Register in December 1998 or early January 1999 with a Record of Decision published 30 days later. It is recognized that implementation will be preceded by further interactions with states and regulatory agencies.

On August 17, 1998, representatives from the DOE Site Specific Advisory Boards (SSAB) met in Las Vegas, NV. The options in the WM PEIS were discussed and Brendolyn Jenkins, representing the SRS CAB, suggested that a useful method of getting input from the various SSABs would be to have each SSAB rank order the options. This suggestion was accepted. To be useful to DOE in selecting preferred alternatives, input from SSABs needs to be provided by November 30, 1998.

DOE evaluated six options for disposal of LLW in the WM PEIS. They ranged from four sites disposing of their own LLW and one site taking offsite waste to three sites disposing of their own LLW and two sites taking offsite waste. There were advantages and disadvantages of the different combinations. Disposal at commercial LLW disposal sites was not considered as it is prohibited by DOE policy (DOE Order 5820.2A)[2].

Five options were evaluated for disposal of MLLW. They involved different combinations of MLLW going to the Nevada Test Site, Hanford, and SRS. One option had MLLW going to SRS. However, SRS can not dispose of MLLW as SRS does not have the facilities. Disposal of MLLW is also prohibited by SCDHEC because SCDHEC siting criteria cannot be met.

The SRS CAB used the following criteria in developing their recommendations on options:

- Costs - minimize
- Fatalities (worker and transportation) - minimize transportation fatalities
- Mission Continuity - maintain two disposal sites
- Groundwater Protection
- Equity - for some waste to come into a state some waste should leave (not necessarily the same kind)

The SRS CAB could have taken a parochial view of just managing SRS's own LLW and MLLW. However, we did not. As mentioned previously SRS can not have a MLLW disposal facility. SRS also has Special Case LLW which does not meet the Waste Acceptance Criteria for the SRS LLW Disposal Facility. This waste will have to go elsewhere. The SRS CAB supports the efforts by DOE to optimize waste disposal across the DOE complex and believes that the country and the states need to view this issue from a national perspective instead of a parochial one.

In developing the following recommendations we used data contained in the information package prepared by DOE Headquarters.[3]

Recommendations:

The SRS CAB wants to be very clear that it will not support regional disposal of DOE wastes if other states prohibit regional disposal. If DOE does not guarantee that some wastes (i.e., MLLW and Special Case Low-Level Waste) will leave SRS, then the SRS CAB cannot support accepting more LLW.

The SRS Citizens Advisory Board makes the following recommendations:

1. If DOE selects SRS as the East Coast regional disposal site, the SRS CAB will support this BUT ONLY IF the actions in (5) below are accomplished. Option 3 has SRS taking care of its own LLW and that from DOE sites east of the Mississippi River (the traditional sites of Ames, IA; Argonne East, IL; Brookhaven, NY; Portsmouth, OH; Princeton, NJ; West Valley, NY; in addition, Oak Ridge, TN would be added). The volume of LLW from Oak Ridge is a little less than SRS's; and the rest of the eastern sites generate much less than generated by SRS. Building LLW disposal facilities at Oak Ridge is geologically difficult and expensive. Option (3) is the lowest cost option, has the fewest projected traffic fatalities, preserves mission continuity with two sites in different regions of the country, minimizes transportation and is as protective of groundwater as any other option. Option (2) would be preferred by SRS CAB but would increase transportation requirements since both offsite disposal facilities would be in the western U.S. (Hanford and NTS).
2. Do not select MLLW Option (C) which involves SRS as SRS cannot dispose of MLLW. We suggest Option (B) for Mixed Low-Level Waste. Option B has Hanford and the Nevada Test Site taking care of their own MLLW and each site taking MLLW from others in such amounts that the total MLLW at each of these two sites is about the same. This option is next to the lowest cost option, has the fewest fatalities, preserves mission continuity by using two sites which have permitted facilities, and is as protective of the groundwater as any other option. Although there would be an economic benefit to South Carolina from building and operating Mixed Low-Level Waste disposal facilities at SRS it is not possible under current SCDHEC regulations. In addition, we do not believe it is in the best interest of the US taxpayer to fund new facilities when such facilities already exist elsewhere in DOE.
3. None of the options permit SRS to ship SRS LLW offsite. SRS has Special Case Low-Level Waste which does not meet the Waste Acceptance Criteria for the SRS Low-Level Waste Disposal Facility. Offsite disposal may be a necessity for some SRS LLW. The WM PEIS does not directly address this case. Disposal of SRS Special Case Low-Level Waste must clearly be a part of the LLW disposal decision process.
4. Clarify groundwater protection criteria in reference (3) below. Specify why any groundwater protection criteria would be violated for waste disposal which meets any site's Waste Acceptance Criteria for that Low-Level Waste Disposal Facility. Based on SRS Performance Assessment and the Composite Analysis results, groundwater criteria would not be exceeded given the current Waste Acceptance Criteria.
5. SRS CAB support for the Low-Level Waste Option 3 is predicated upon the following actions occurring:

1. Oak Ridge takes SRS hazardous waste for incineration in the Toxic Substances Control Act (TSCA) incinerator.
2. SRS Mixed Low-Level Waste is disposed offsite and out of state.
3. A Site other than SRS takes SRS Special Case Low-Level Waste for disposal.
4. Adequate funding is provided to SRS and its state regulator to manage and dispose of eastern regional LLW, the bulk of which is the Oak Ridge Low-Level Waste coming to SRS under Option (3).
5. The equitable disposition of other SRS wastes. (Examples are shipment of Pu-239 and Pu-238 in economically acceptable amounts per package wastes to the Waste Isolation Pilot Plant (WIPP) in New Mexico and the shipment of SRS vitrified High Level Waste to Yucca Mountain Nevada for disposal.)
6. If DOE and the State of South Carolina reach an agreement on the disposal of eastern regional LLW, the bulk of which is Oak Ridge Low-Level Waste, at SRS, this agreement could include a framework similar to one drafted by the State of Nevada and the Nevada Test Site that allows DOE-SR to share regulatory oversight with the State.

6. When DOE communicates its preferred option to the states for LLW and MLLW disposal options prior to the Federal Register notice, the SRS CAB requests the opportunity to provide additional input regarding actions necessary to ensure equity.

References:

1. Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste, DOE/EIS-0200-F, U. S. Department of Energy, May 1997
2. DOE Order 5820.2A, Radioactive Waste Management and its replacement 435.1
3. Information Package on Pending Low-Level Waste and Mixed Low-Level Waste Disposal Decisions to be made under the Final Waste Management Programmatic Environmental Impact Statement, U. S. Department of Energy, September 1998