



Recommendation No. 147

January 15, 2002

Parallel Salt Disposition Strategy

Background

On October 17, 2001, the long awaited Record of Decision (ROD) on the Salt Processing Alternative for the Savannah River Site (SRS) was published in the Federal Register (Ref 1 and Ref 2). DOE decided to implement the Caustic Side Solvent Extraction (CSSX) process for the separation of radioactive cesium from SRS salt wastes. Implementation of this technology will consist of designing, constructing, and operating a facility in S-Area. DOE is soliciting two contracts and has released a multiphase request for proposals from contractors for the conceptual design, detail design, and construction startup and initial operations of the CSSX facility. DOE expects to award the two contracts in May 2002 and believes this approach will help minimize risks and reduce the overall cost of the project.

As part of the ROD, DOE, in parallel with the procurement, is also evaluating other salt processing alternatives for specific waste portions for which processing could be accelerated. These evaluations and potential operations would be undertaken to maintain operational capacity and flexibility in the High-Level Waste (HLW) system, and to meet commitments for closure of the HLW tanks. One of these evaluations and a key to the success of tank space capacity and flexibility, is the disposal of low-curie saltcake to Saltstone without further processing. If successful, this process would create tank space to support more waste removal, feed preparation, and tank closures.

Comment

The primary concern of the SRS CAB is to maintain the current HLW Tank closure schedule and to have a salt processing facility, fully not partially, operational by 2010 (Ref 3,4,5,6,). Any deviation in the Federal Facility Agreement closure schedule is considered unacceptable. Determining whether the low-curie saltcake can be sent directly to Saltstone without additional processing is important to meeting the FFA closure schedule. Furthermore, the SRS CAB expects to have a full scale salt processing facility operational by 2010 not a small scale or partial operating facility. Not counting the technical difficulties, the SRS CAB has concerns about two potential procedural roadblocks.

One issue could be the Incidental to Reprocessing determination and the other could be the coverage of the proposed process under the existing Environmental Impact Statement (EIS). The Incidental to Reprocessing determination is required to allow the resulting waste to be managed as a waste type other than HLW. If it is not successful, the HLW determination would precluded the low-curie saltcake being sent directly to Saltstone. Furthermore, if the proposed process can not be covered under the existing EIS, then a new EIS will be required, which could delay the project and interfere with the FFA Closure Schedule.

Recommendation

The SRS Citizens Advisory Board again confirms it position that the FFA closure schedule must be met, including start up of a full scale salt processing facility by 2010 and the closures of the HLW tanks as scheduled. To resolve the questions about the low-curie saltcake strategy and to ensure compliance with the FFA closure schedule, the SRS Citizens Advisory Board recommends that by April 23, 2002, SRS:

1. Determine the permit and regulatory requirements (i.e., NEPA, Incidental to Reprocessing determination, etc.) for determining whether the low-curie saltcake can be sent to Saltstone without further processing and report the findings to the SRS CAB.
2. Provide a synopsis of the technical plan to process the first 100,000 gallons of low-curie saltcake without further processing to the SRS CAB.
3. Identify costs and funding needs and projected milestones and timelines to make the determination whether the low-curie saltcake can be sent to Saltstone without further processing

to the SRS CAB.

References

1. Salt Processing Update, presentation to the WM Committee by Terrel Spears December 11, 2001.
2. Record of Decision: Savannah River Site Salt Processing Alternatives, Federal Register Volume 66, Number 201, October 17, 2001.
3. Citizens Advisory Board Recommendation No. 69 (adopted November 17, 1998), "Selection of HLW Salt Disposition Alternatives".
4. Citizens Advisory Board Recommendation No. 81 (adopted March 23, 1999), "High Level Waste Salt Disposition Alternatives to the In-tank Precipitation Process Supplemental Environmental Impact Statement".
5. Citizens Advisory Board Recommendation No. 112 (adopted January 25, 2000), "Selection of HLW Salt Processing Alternative".
6. Citizens Advisory Board Recommendation No. 137 (adopted April 24, 2001), "Salt Processing Alternatives Draft Supplemental Environmental Impact Statement".

Agency Responses

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