



SRS Citizens Advisory Board

Salt Processing Focus Group

Meeting Summary

November 21, 2000
Aiken Federal Building
Aiken, SC

The Salt Processing Focus Group met on Tuesday, October 24, 2000, at 5:00 p.m. at the Aiken Federal Building in Aiken, SC. Attendance was as follows:

Wade Waters	Ken Rueter, WGI
Lee Poe	Tom Lex, WGI
Mike French	Steve Piccolo, WGI
	Kelly Dean, WGI
	Jim McCullough, DOE
	Carl Everatt, DOE

Evaporator Recovery Program

Tom Lex, Chief Engineer, WGI, briefed the group on the Evaporator Recovery Program and Tank Space Management. Mr. Lex explained that currently the 2H evaporator has high levels of silicon in the feed material that has caused crystalline deposits to form in the evaporator. These deposits are formed because there is sodium and aluminum in the waste, and there are high levels of silicon from the DWPF recycle. These deposits create the nucleation sites for the disposition of sodium diuranate from uranium that is in the system, which leads to an issue of criticality. Currently, the evaporator is criticality safe, but the deposits in the evaporator must be cleaned out and controls are being developed to address this issue for future operation of 2H. Mr. Lex described the cleaning process for the evaporator. The pot will initially be filled with water to remove the salt deposits. Then several cycles of nitric acid with depleted uranium will be added to remove all remaining deposits.

The 2H evaporator has been shut down since January 2000 and won't be back on line till spring 2001. There will be no more tank space by January 21, 2001 for DWPF recycle in the Type IV tanks, and all Type III tank space is required for current and future high activity waste storage. Therefore, in order to avoid shutdown of the DWPF, waste must be transferred to the Type I tanks. Mr. Lex emphasized that Tanks 2 through 8 are structurally sound and safe, have no leak sites, have annual inspections, and are being upgraded. In fact, Tank 6 is on schedule to receive waste in mid December 2000. Mr. Lex emphasized that this solution is not a permanent one and that the 2H evaporator must be on line by August 2001.

When asked the contents of Tanks 5-6, Mr. Lex answered that Tank 5 is a dry sludge tank, while Tank 6 contains sludge with a liquid supernate on top. The supernate in Tank 5 evaporated in the mid '80's.

Mr. Lex said that HLW has briefed SCDHEC and the Defense Nuclear Facilities Safety Board (DNFSB) on the situation, and the regulators have agreed to the use of Type I tanks. The Federal Facilities

Agreement (FFA) states that Tanks 2-8 are acceptable to use. This situation will not impact the tank closure dates.

Mr. Lex explained that the benefits of using Type I tanks include continued operation of DWPF beyond January 21, 2001; the storage of low risk waste allows continued immobilization of higher risk sludge; and continued preparation of the next sludge feed batch for DWPF. Mr. Lex then compared the differences among Type I, Type III and Type IV tanks by using overhead slides depicting individual characteristics for each tank type. Mr. Lex also showed an overhead slide of all the tanks and the waste tank levels by tank types.

Mr. Lex concluded his presentation by noting the following: Type I tanks 5, 6, and 8 will be used for safe storage of waste; HLW will begin transfer of the first DWPF recycle to Tank 6 by mid December 2000; HLW will begin transfer of the first material from DWPF sludge batch preparation to Tank 8 in January 2001; and HLW will begin transfer of DWPF recycle to Tank 5 in February 2001. Also, Tank 6 is scheduled for waste removal in 2013 with closure in 2016, while tank 5 is scheduled for waste removal in 2008, with closure in 2011. SRS is still in compliance with the FFA and DHEC.

Technology down Select Criteria

Jim McCullough, Team Leader for HLW Engineering, DOE, briefed the group on the Technology down Select Criteria to date. Mr. McCullough outlined the steps to identify and score the criteria. He pointed out that the data moves from a qualitative realm to a quantitative realm. He mentioned that the department reviews the data quarterly and goes through a scoring process. Mr. French questioned a quarterly review being adequate. Mr. McCullough emphasized that his group sits down weekly and discusses changes. Mr. Piccolo added that the quarterly review is predicated on the fact that one gets his expected outcome from the R&D. The Quarterly reviews were originally set-up for Carolyn Hontoon to determine if a decision could be made earlier.

He continued by outlining the goals that are used to define success and the criteria that are used to measure the effectiveness of reaching the goals. Mr. Poe suggested that these goals are not technical, but more administrative. Mr. McCullough responded that the goals, developed by the technical working group, might be obvious, but still need to be included on the list. From the goals, approved down-selection criteria were developed. Mr. McCullough then outlined the scoring and weighting approaches. He pointed out that evaluators might place different weights on the goals.

In summary, Mr. McCullough stated the eleven criteria have been approved by DOE-HQ, the scoring is re-evaluated quarterly, the weighting scenarios have been evaluated, the final weights will be assigned by the decision makers, and the down selection is scheduled for June 2001.

Mr. Rueter added that closure of risks drives the schedule. Mr. Poe stated that he believed closure of risks to be the key issue, and the reason SRS is waiting till June to make a selection. Mr. Waters stated that DOE had not utilized the resources they have through the CAB, as they should. Mr. Rueter emphasized that a good, knowledgeable input into the NEPA process from the Salt Focus Group would produce far reaching influence. Mr. Poe answered that the Focus Group had committed to the CAB to do this.

Mr. Poe asked for further discussion. There being none, he dismissed the meeting at 7:45 p.m.

Meeting handouts may be obtained by calling 1-800-249-8155.