



## **SRS Citizens Advisory Board**

### **Salt Processing Focus Group**

#### **Meeting Summary**

June 25, 2001  
Aiken Federal Building  
Aiken, SC

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**The Salt Processing Focus Group met on Monday, June 25, 2001, at 4:30 p.m. at the Aiken Federal Building in Aiken, SC. Attendance was as follows:**

Mike French	Kelly Dean, WSRC
Bill Willoughby	Teresa Haas, WSRC
Lee Poe	Bill McDonell
John Reynolds, DOE	Joe Carter, WSRC
Larry Ling, DOE	Wade Waters, CAB
George Mishra, DOE	Dennis Godbee, DOE
Ernie Chaput	

**Wade Waters welcomed everyone and introduced John Reynolds.**

#### **Updates-RFP and Salt EIS**

John Reynolds, DOE, updated the group on the Request for Proposals (RFP). The draft RFP was issued May 24, 2001. Comments are due June 28, 2001, with the final RFP due in late July/early August time frame. The contractor award is scheduled for early FY02. Mr. Chaput pointed out that this two-month turn around for a final proposal is very ambitious. Conceptual design is part of the contract. It will be the first deliverable from the newly named contractor. There will be two competing contractors up until conceptual design.

Mr. Poe pointed out that the RFP seems to be written expecting one single technology, not a technology and a back up. Mr. Reynolds clarified that an alternate technology will be addressed separate from this contract. This contract will focus on primary technology. Mr. Chaput asked if the back up would go full pilot. Mr. Reynolds answered that the back up would be carried only to laboratory scale. Mr. McDonell asked if the contractor has the responsibility for the existing pre conceptual design. Mr. Reynolds clarified that between the technical selection and the conceptual design, all work done on the conceptual design would be transferred to the new contractor.

In response to a question concerning how much interest in bidding does DOE expect, Mr. Reynolds replied that following receipt of comments on the draft RFP, there would be more of an idea of who is interested. Approximately ten companies were represented at the one-on-one meetings last December. Mr. Chaput voiced concern about there being two contractors dealing with WSRC, DOE, and each other. He anticipates administrative type problems. Mr. Reynolds replied that there would be an integrated project team in place with information from DOE and WSRC shared equally. Design information from the contractors would require fire walling during the conceptual design competition.

Mr. French asked why the original figure changed from \$500M to \$100M. Mr. Reynolds answered that the team had looked at the Office of River Protection Contract (Vit. Plant at Hanford) which is five times larger than this contract and applied a ratio to arrive at this figure.

When asked about the communications between contractors, Mr. Reynolds clarified that the flow of information to the EPC's would be uniform. Ground rules would be established in the beginning. Further, answers to any questions asked by one team, would be provided to both teams. Delivery date for the Conceptual Designs would be established during contract negotiations with both contractors.

Mr. Reynolds continued. There will be personnel available for a complete technology transfer for information exchange. DOE plans to make a down select decision as soon as possible after the conceptual design is complete (approximately 30 days), since the decision will be by Savannah River. The evaluation process will start the first day of the contract award. Detailed costs estimates and schedules will be required deliverables from the contractors.

When asked about the budget for this line item, Mr. Reynolds explained the Project Engineering and Design (PED) Data Sheet funding process that supports design work through submittal (following Preliminary Design) and approval of the Construction Line Item Data Sheet. DOE is planning to specify a "not to exceed cost" clause in the contract. DOE is giving the designers the conceptual design period to formalize this data.

Mr. Waters asked if he could summarize what he understood thus far, which is that two contractors, both being paid by DOE, come up with a conceptual design. DOE determines which one meets the requirement and makes a choice. This contractor proceeds with the preliminary design and finishes the project. The winning contractor can use anything that was produced by either contractor before DOE made the selection.

The Pilot Plant will operate during the preliminary design phase. DOE is asking for EPC input into the pilot plant design. Mr. Waters asked for a projection date for identifying the preferred technology, which transitioned Mr. Reynolds to his next slide. EM-1/EH-1 approved the Supplemental EIS the week of June 18. Headquarter and Congressional distribution is scheduled for June 28-29. The target delivery to EPA is June 29 and the target issue in the Federal Register is July 6. This starts the 30-day clock for the ROD, which is targeted for August 6.

Mr. Chaput congratulated the DOE on putting together an aggressive schedule and adhering to it. He asked Mr. Reynolds about the roles of the Tanks Focus Area and the Technical Advisory Team. Both groups will be maintained and utilized as they have been to date. The teams will not assist with contractor selection, SR will make the down select.

#### Salt Processing Project Technology Development Update

Joe Carter, WSRC Salt Processing Engineering Manager, updated the group. For MST kinetics and sorption chemistry, there is no new data. The kinetics tests provided the bases for equipment sizing. There was good agreement in tests with real and simulated high-level waste. The plutonium kinetics rate was limiting for all three process options. In the slurries with sludge and MST, the real waste filtrate rates agree reasonably with estimates based on pilot-scale tests with simulated waste. The pilot data appears conservative relative to real waste samples tested. Mr. Chaput asked about the tanks that were sampled. Mr. Carter replied that the tanks represent various attributes of F & H area tanks. Dried sludge was used because it filters better. The samples were "middle of the road"; not bounding one way or the other.

From the small tank stand point, the real waste continuously stirred test reactors (CSTR) Highlights obtained the required Cs Dilution Factor (DF) in less than 24 hours and maintained the

required DF for the duration of the run. The required DF for strontium and total alpha was also obtained in less than 24 hours and the required DF was maintained for the duration of the run. B52 antifoam was effective with real waste for foam control in both column tests and in the CSTRs. Mr. Carter reminded the group that a year ago the tests were stopped because of foaming, so these results are good. The TPB catalytic decomposition occurred at 45 degrees C with benzene generation rate of 2.4mg/(L-h). Stable operation was demonstrated for the duration of the run. Mr. Carter showed that for the real waste CSTR test, cesium DF was achieved and never lost. Activity was expected to go up if DF was lost.

The real waste performance tank 37H/44F test results for solvent extraction operated for a total of 48 hours. Three upsets occurred due to exceeding the flow capacity caused by density and viscosity change from simulant to tank waste, but recovery was achieved from all three upsets. The concentration factor was 12.8 for the first 24 hours and 14.4 for the last 10.5 hours. The goal is 15. Overall these tests were very good.

#### Comments from Mr. Waters

Mr. Waters thanked Mr. Carter and Mr. Reynolds for sharing their presentations with the group. He then asked that a Tank Space Management presentation be made for the July 11 Waste Management Committee meeting held at the North Augusta Community Center at 6:00. He went on to explain that when people operate in more than one direction, it makes it very difficult for him to do his job.

On June 2, Mr. Waters sent a letter to Karen Patterson, chairperson of the CAB, about the status of the focus groups sponsored by the WM Committee. Mr. Waters proposed that the group complete its work and prepare a final report for presentation to the CAB at their October 2001 meeting. If the CAB accepts the final report, then the Salt FG would be disbanded.

Mr. Waters then turned to the business at hand—comments on the draft RFP. The group spent the next two hours discussing their responses and sending individual letters to the following:

US Department of Energy  
Contracts Management Division  
Attn: Charlene Smith  
P.O. Box A  
Aiken, SC 29803

The meeting was dismissed at 7:30 p.m.

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