SRS Citizen's Advisory Board

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Waste Management Committee

Aiken Federal Building
Aiken, SC
June 24, 2003

The SRS Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Tuesday, June 24, 2003, 5:00, at the Federal Building, Aiken, SC. The purposes of the meeting were to discuss the West Valley EIS, Saltstone, pending recommendations, and to receive public comment.

Attendance was as follows:

CAB Members	**Stakeholders**	**DOE/Contractors**
-Bill Willoughby	Bill McDonell	Jeff Newman, WSRC
Gerald Devitt	Russ Messick	Larry Ling, DOE
-Harold Rahn	Gary Smith	Ron Campbell, WSRC
DeAnne Smoak	Om Mendiratta	Sonny Goldston, BNFL-SW
-Murray Riley	Karen Patterson	Jim Cook. WSRC
		Julie Petersen, DOE
	Rick McLeod*	Kelly Way, WSRC
		George Mishra, DOE
		Bert Crapse, DOE
*CAB Technical Advisor		Richard Rustad, DOE
-WM committee members		Dennis Thompson, WSRC

Bill Willoughby called the meeting to order at 5:00. He welcomed those in attendance and asked for introductions.

Mr. Willoughby asked Larry Ling, DOE, to update the committee on the Waste Incidental to Reprocessing (WIR) lawsuit. The hearing was held in Idaho on June 20. Department Of Justice (DOJ), on behalf of DOE, presented their final argument to the judge. The judge made no decision, but took the arguments under advisement. He will make a ruling in 2-3 weeks.

The Natural Resources Defense Council (NRDC) wants to do away with the WIR evaluation determination process, and DOE wants to keep it. Whoever loses will probably make an appeal, which could be a lengthy process. South Carolina is one of the states that has joined the lawsuit. As a result of the lawsuit, it is unlikely that SCDHEC will approve any permits or documents that are predicated on the WIR process until the lawsuit is resolved.

Mr. McDonell asked if SR would be required to dig up the tanks and dispose of them elsewhere. Ms. Patterson answered that some of the plaintiffs have asked that this happen.

Mr. Willoughby pointed out that a one time DOE used the defense that the National Waste Policy Act (NWPA) did not apply to defense waste. Mr. Ling answered that previous motions filed by DOE as part of this case did focus on the applicability of the NWPA. These motions are still valid and are still in front of the Judge for his consideration. DOJ did address this during the Oral Arguments. DOJ also argued the timing of the lawsuit, since this is a facial challenge by the NRDC.

Preparing Saltstone for Low Curie Waste, Dennis Thompson, Saltstone Facility Manager
Mr. Thompson stated that the facility has been pursuing modifications and upgrades to prepare for the receipt of Low Curie Salt (LCS). He explained the strategy and status to the committee.

He quickly reviewed the tailored salt treatment plan, gave a background on the original In Tank Precipitation (ITP) concept, and then explained the current concept. He pointed out that almost all of the radioactivity is Cesium 137 (Cs-137), which is very short lived (the half-life is 30 years). He explained that the benefits of accepting higher curies are getting the waste out of tanks faster, thereby eliminating risks earlier, and making less glass, which eliminates the need for a large Salt Waste Processing Facility. He pointed out that up to 4% of the current radionuclide volume would be coming to the SaltStone (SS) facility.

The current SS process involves taking liquid waste and mixing it with key dry materials. He pointed out several challenges with the existing process; the primary problem is the constant challenge of processing a material that wants to set up and harden as soon as the waste is mixed with dry materials. Any time the grout is not moving through the process and any dead zones inside some of the process tanks are vulnerabilities to steady operations. SRS uses centrifugal pumps to transport the waste all the way to the vaults.

An even bigger challenge is preparing the existing SS facility to accommodate up to 0.4-curie/gal waste by 8/01/03. Permit modifications are required in order to proceed. Complicating this aggressive schedule was the fact that the facility was not availabe for construction until the Tank 50 campaign was completed toward the end of May.

Mr. Thompson decided the best strategy would be to divide the SS preparation project into two steps. The first step would be to modify the facility for 0.1 ci/gal by 8/28/03, and the second step would be to prepare the facility for 0.4 ci/gal by 10/30/04.

His strategy involved building his own team. He handpicked three experts to help manage the design, construction, and testing. They know the facility and are committed to meeting the challenge.

Mr. Thompson outlined how his team tackled the challenge by reducing the source term, increasing the facility and equipment reliability, and ensuring the flushing capabilities. Mr. Thompson explained how the 50 thousand-gallon SS hold tank was eliminated because the source term would have been too large to shield. He also detailed how the team enhanced a flat-bottomed hold-tank by creating and inserting a stainless steel cone. In addition, the team eliminated one of the two pump trains and added a high-pressure water flush. If a pump were to fail, they could empty out the processing tank and force water through to flush the system. This

flush is a key component in the new design to ensure that personnel can enter the process room to do repairs.

When asked about the permits and the 0.1 ci modifications versus the 0.4 mods, Mr. Thompson answered that all the negotiations with the state are for 0.4 ci/gal waste. The 0.1 ci/gal concept is an internal move that allows SR to prepare earlier. SR has not communicated the 0.1 to the state.

Mr. Thompson explained how the existing permit is based on nominal values of the chemical and radionuclides existing in the tank farms. Sometimes SS exceeds the limits and sometimes they are under. He outlined the differences in the Waste Water permit, the Solid Waste permit, and land fill classifications. He explained the NRC Class C landfill limits. He illustrated the differences in SS from when the state first permitted it and now. He added that the state has given them the necessary construction permits and has been supportive.

Continuing, Mr. Thompson pointed out that the design is 98% complete and construction is 25% complete. All regulatory requirements for construction have been met and all engineered equipment has been ordered with shipment dates that meet the schedule.

In order to operate, SCDHEC must issue a permit modification The level of concern has been raised from the solid waste disposal permitting side because of the radioisotopes; however, this is misleading because of the short half life of Cs-137 (in 100 years there will be fewer curies in the state than under the current permit). SS meets the specifications for the Waste Water permit. The cost of this project is approximately $8-million.

Mr. Thompson closed by outlining his SS strategy for the next two years and pointing out the Vulnerability and Alternative Studies that have been scheduled preparing for the 0.4 ci/gal projects.

West Valley EIS, Drew Grainger, DOE NEPA Compliance Officer
Mr. Grainger provided background on the West Valley Demonstration Project (WVDP), described the draft WVDP Waste Management Environmental Impact Statement (EIS), outlined why the CAB might be interested in the WV EIS, and described the public involvement opportunities.

Mr. Grainger gave some background on the WVDP. It was originally a commercial fuel reprocessing plant. Since 1976, it has been run by the state of New York.

Mr. Grainger explained the background of the WVDP Waste Management EIS. A WVDP Completion and Closure EIS was begun in 1988 with the draft issued in 1996. The DOE and the State of New York have not been able to reach an agreement on the preferred course of action for closure of the WVDP; therefore DOE is preparing two EIS's. One of these is a Decommissioning and Long-Term Stewardship EIS, and the other is the WVDP Waste Management EIS. The NOI for the WVDP Decontamination and Decommissioning EIS was issued in March 2003, and the draft WVDP Waste Management EIS was issued in May 2003.

There was one scoping meeting held during the 30-day scoping period, in April 2001 at West Valley, New York.

The scope of the WVDP Waste Management EIS is limited to onsite waste management and offsite transportation of waste. There are three alternatives. The EIS impact analysis focuses on human health.

The "no action alternative" allows continuation of ongoing activities, including offsite shipment of some low-level waste.

"Alternative A", the preferred alternative, seeks offsite shipment of waste for disposal and ongoing management of Waste Storage Tanks. (Note the word disposal not storage.) The preferred alternative does not involve SR.

"Alternative B" seeks offsite shipment of waste for disposal or storage and interim stabilization of Waste Storage Tanks.

The "no action alternative" involves continuing with the WM activities, which are storing material at WV, shipping some low level waste, and processing some chemical process cell waste. The four high-level waste tanks at WV are in the water table, so they must be continually ventilated to manage the moisture levels.

"Alternative A", the preferred alternative, involves shipment of waste for disposal and ongoing management of tanks. The low-level waste and mixed low-level waste would be shipped to DOE (Hanford or the Nevada Test Site) or commercial sites (e.g., Envirocare) for disposal. Transuranic (TRU) waste would be shipped directly to the Waste Isolation Pilot Plant (WIPP) for disposal. HLW (waste in glass in stainless steel canisters) would be shipped directly to the geologic repository for disposal. The high-level waste tanks would be ventilated to manage the moisture levels.

Ms. Patterson asked the reason for this being a DOE problem and not a NRC problem. Mr. Willoughby answered that ownership was transferred to DOE because the original owner was going to walk away. DOE took it as a "test bed" to prepare for clean up of other sites, i.e. Hanford, SR etc. In addition, Mr. Grainger explained that the WVDP Act of 1980 gave waste management and disposal responsibilities to DOE.

"Alternative B" would involve SRS. This alternative involves offsite shipment of waste for disposal or storage and ongoing management of tanks. The WVDP HLW canisters are very much like SR’s canisters. When asked about schedule, Mr. Grainger offered that this EIS does not include a schedule. SR is included as one of two sites for receipt and interim storage of HLW and one of five sites for receipt and interim storage of TRU waste. Low level and mixed low level waste are to be shipped to "DOE and or commercial sites for disposal."

Mr. Grainger went on to outline some issues for SR if "Alternative B" is implemented. Under the Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act, WIPP can only recieve and dispose of defense waste. The WV TRU has not been determined to be defense waste because some of it

results from processing spent fuel from commercial power reactors. If Alternative B is implemented, and this waste is shipped to SR (or any other interim storage site), unless this material is found to be defense waste or the WIPP Land Withdrawal Act is amended, SR could not ship it to WIPP. SR probably has adequate storage capacity, but may have to construct or modify capacity to store the WV TRU waste.

In addition TRU waste shipping containers would need to be available, and the SR TRU waste shipment schedule to WIPP must not be compromised. Finally, HLW creates a different problem. At the moment, SR doesn't have a shipping and receiving facility to accommodate the WV canisters. A facility at SR to accommodate the receipt and shipment of the WVDP canisters would have to be built.

Ms. Patterson mentioned that commercial waste has priority at Yucca Mountain. She suggested that SR offer a trade: if this commercial waste comes here, then SR's defense waste should be allowed to be sent to the repository at the same time as the commercial waste.

Mr. Grainger pointed out that there is no discernible difference in human health impacts among all the alternatives. He outlined the public participation opportunities. He mentioned that the SRS CAB has asked for an extension of the public comment period. He indicated that West Valley will probably assure the committee that WV will consider the SRS CAB's comments, but they don't want to extend the comment period.

Recommendation Review
Mr. Willoughby discussed the differences between the WV EIS Summary and the full EIS. He discussed the Recommendation 51, which was the CAB's first recommendation concerning the WV waste. He outlined several options the WM Committee has concerning public input into the WV EIS.

Options

1. Each member could submit individual comments or the WM Committee could submit one comment on the WV EIS.
2. Mr. Willoughby could write a comment within the comment period expressing concern over the lack of information in the Alternative B.
3. The committee could write a recommendation to DOE pointing out the specific problem areas with the alternatives, but adding if these problems can be resolved, then the WM Committee and CAB would consider Alternative B.
4. The committee could write a recommendation stating that they have examined Alternative B and concluded that accepting the waste from WV is not conducive to the site.

Mr. Willoughby then asked Mr. Goldston to give a short update on Ines Triay. Mr. Goldston stated that Ms. Triay would like to attend the November 18 CAB meeting to brief the CAB on the national ship to WIPP program with emphasis on the SRS issues and the recent SRS CAB recommendations. She is the DOE manager of the WIPP facility.

Next the committee reviewed open and/or pending recommendations to determine which could be closed. The committee voted to close the following recommendations:

#138: HLW Tank Closure Draft Environmental Impact Statement
(The EIS and ROD were issued over a year ago.)

#147: Parallel Salt Disposition Strategy
(SRS has determined the permitting and regulatory requirements for low curie salt, summarized the LCS technical plan for the CAB/WMC, and has provided information on the cost and schedule for the LCS program to the CAB/WMC.)

#159: Low-Curie Salt to Saltstone
(SRS continues to focus on tank closure and salt waste disposal regardless of the status of the litigation in Idaho. Also, the series of meetings with the WMC on the Salt Waste program was held.)

Mr. Willoughby then asked for public comment. There being none, he dismissed the meeting at 7:40.