



## SRS Citizen's Advisory Board

### May 2000 Meeting Minutes

#### **SRS Citizens Advisory Board**

May 22-23, 2000  
DeSoto Hilton  
Savannah, GA

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#### **Members Present**

Bill Adams	Maria Reichmanis	<b><u>Ex-Officio Representatives</u></b>
Sallie Connah	Lola Richardson	Julie Corkran
Tom Costikyan	Murray Riley	Tom Heenan
Mel Galin	P.K. Smith	Jonathan McInnis (alternate)
Ken Goad	Jean Sulc	Kim Newel (alternate)
Perry Holcomb	Charleen Townsend	
Brendolyn Jenkins	Bill Vogele	
William Lawrence	Wade Waters	
Georgia Leverett	Bill Willoughby	
Jimmy Mackey	Beckie Witter	
Karen Patterson		

Board members Kathryn May, Lane Parker, Carlyne Williams and Beaurine Wilkins were absent. Currently, there are no Board vacancies. The Department of Energy (DOE) Designated Federal Official present was Tom Heenan. Mike Schoener served as facilitator.

The meeting was open to the public and posted in the *Federal Register* in accordance with the Federal Advisory Committee Act.

#### **Key Decisions Made by the Board**

##### **Recommendation No. 122 - Total Maximum Daily Loads**

The SRS CAB recommended that EPA formally request an extension of no less than 6-10 months to a court-imposed date regarding total maximum daily loads for mercury in the Savannah River Basin. The Board recommended that EPA take this time to collect analytical data from the Savannah River to formulate a more site-specific TMDL using this data instead of fish advisory data to evaluate whether the middle/lower Savannah River Basin needs to be placed on the impaired waters body list. The SRS CAB also asked DOE to identify which SRS outfalls can currently meet the proposed TMDL limit without further treatment; those that will require further treatment; potential treatment technologies available and costs to comply with the proposed TMDL.

##### **Recommendation No. 123 - Whole Effluent Toxicity Testing Impacts on SRS Wastewater Outfalls**

Concerned that the Whole Effluent Toxicity (WET) Test method used for controlling toxic pollutants in wastewater discharges may be unreliable and inaccurate, the SRS CAB requested information regarding an Alternate Species Investigation Plan and Toxicity Identification Evaluations. The Board is interested in making cost comparisons and evaluating whether a proposed alternate species would be better suited for the WET test method.

### **Recommendation No. 124 - DWPF Canister Storage**

The SRS CAB recommended that DOE re-evaluate the scope of an environmental assessment regarding storage of glass waste canisters for the Defense Waste Processing Facility. The Board recommends that before DOE decides on which approach (a second glass waste storage building or dry above ground storage) to take, they reassess the EA based on general and specific CAB comments. Many of the general comments focus on an escrow account and the ability of a vendor to revert disposal responsibility back to DOE.

### **Recommendation No. 125 - WIPP RCRA Permit Modification-Miscertification Rate**

As noted in previous recommendations, the SRS CAB remains concerned that the RCRA Permit for the Waste Isolation Pilot Plant requires too many visual and intrusive examinations to assay containers, which are unnecessary and pose a danger to SRS workers. The SRS CAB supports requested modifications to reduce the miscertification rate from 11 percent to one percent.

### **Recommendation No. 112 Amended - Selection of HLW Salt Processing Alternative**

The SRS CAB amended Recommendation 112 to request that DOE develop a decision tree that outlines how DOE would address a schedule slippage in selecting an alternative salt processing technology. The goal would be to ensure that any schedule slippage would not affect HLW tank space needs, regulatory commitments or other SRS activities. The SRS CAB wants DOE to focus on selecting an alternative technology as quickly as possible, however the Board feels it is also imperative that potential impacts from delays be addressed as real possibilities and contingencies identified to avoid construction of new HLW tanks or delays in closing existing tanks.

### **Approval of the Minutes**

The March 2000 meeting minutes were approved with no changes.

### **Agency Update**

Julie Corkran of EPA announced that Kim McSwain, a new student intern and recent graduate of Agnes Scott College would be working with EPA-Region IV for the next year. Ms. Corkran also announced that the Land Use Control Assurance Plan had been signed by the three agencies. Tom Heenan provided an expanded Operations Update (see attached) noting the amount of work being accomplished at SRS.

### **Facilitator Update**

Board Facilitator, Mike Schoener, provided a recommendation status update noting that 31 recommendations are pending responses, 41 are open, and 49 closed. He noted that the CAB was awaiting seven responses from EPA, one from DHEC and one from DOE. Mr. Schoener also briefly discussed the CAB Recommendation Process noting that discussion and minor modifications to recommendations on the floor will always be allowed. He also suggested that committee members championing a motion need to provide clarification and explanations.

Mr. Schoener discussed the next combined committee meeting to be held on June 27 in Beaufort, S.C. and discussed a draft agenda. The final draft of the SRS CAB Workplan was presented by Mr. Schoener as well. He received agreement from the Board on priority issues and noted the final plan would be issued shortly.

### **Nuclear Materials Committee Report**

Nuclear Materials Committee Vice Chair, Ken Goad, noted that the Defense Nuclear Facilities Safety Board has not yet received DOE's Implementation Plan for DNFSB Recommendation 2000-1 and the CAB looked to receive a briefing in the next few months. He also noted that a strategic approach to long term integration of nuclear materials is still being reviewed and should be provided to Congress shortly.

Charlie Anderson, DOE Acting Deputy Assistant Manager for Material and Facility Stabilization, provided a presentation regarding Surplus Plutonium Disposition (see attachment). Mr. Anderson stated that the intent of the program is to convert approximately 50 metric tons of plutonium from each of the United States and Russia's weapons stockpile to a form no longer suitable for nuclear weapons. The U.S. is pursuing two pathways to accomplish this goal. The two pathways are immobilization of 13 tons of plutonium in waste to convert the remaining plutonium in commercial reactors to mixed oxide fuel (MOX) for use. Currently, only 35 metric tons appropriate for conversion to MOX have been identified. This two-pronged approach was decided following a lengthy NEPA process. Three facilities will be required and all will be located at SRS, he said. Mr. Anderson discussed the project strategy for each of these facilities and the contracts awarded for conceptual design. He also discussed programmatic challenges stressing that this program will not proceed without a bilateral agreement from Russia. Budget realities may also result in slowdown, he said.

### **Environmental Remediation Committee Report**

#### **Total Maximum Daily Load**

Bill Payne, WSRC, provided a presentation regarding Total Maximum Daily Load for Mercury in the Savannah River Basin (see attachment). A TMDL is the amount of a pollutant that a waterbody can receive and still meet water quality standards. The TMDL for mercury in the Savannah River Basin was established as the result of a lawsuit brought by the Sierra Club against several states, including Georgia. Because the Georgia Department of Natural Resources did not respond in a timely manner to the required court-enforced deadlines, the Environmental Protection Agency was forced to write a TMDL for mercury and did so very quickly based on Georgia fish advisories. The TMDL becomes effective June 7, 2000 unless EPA can obtain an extension from the court. As written, the TMDL will require all permittees in the lower/middle Savannah River Basin, including SRS, comply with permit limits of 1 part per trillion (ppt). Mr. Payne explained that it will cost millions to comply with this TMDL with little or no benefit to the environment since most mercury in surface water is from air deposition. Mr. Payne stated that several specific SRS concerns are that 1) fish advisories should not be used as the basis for determining waters as impaired; 2) the SRS waters and Savannah River near SRS appear to meet current water quality standards of 12 ppt; 3) factors used in the draft TMDL development are not site-specific to the Savannah River Basin; very few SRS outfalls can meet the 1 ppt limit; and 4) this limit is not achievable by today's treatment technology. Mr. Payne concluded by stating that this TMDL will not reduce the concentration of mercury and that it has not been determined that current mercury concentrations are impairing water quality.

ER Committee Chair, Jimmy Mackey, presented the draft motion (see attached) recommending that EPA formally request an extension of no less than 6-10 months to a court-imposed date regarding total maximum daily loads for mercury in the Savannah River Basin. The motion also recommended that EPA take this time to collect analytical data from the Savannah River to formulate a more site-specific TMDL using this data instead of fish advisory data to evaluate whether the middle/lower Savannah River Basin needs to be placed on the impaired waters body list. It also asked DOE to identify which SRS outfalls can currently meet the proposed TMDL limit without further treatment; those that will require further treatment; potential treatment technologies available and costs to comply with the proposed TMDL. Ken Goad moved the Board accept the motion and Bill Vogeles seconded. The motion was adopted by a vote of 19 members in favor, none opposed and two abstentions by P.K. Smith and Sallie Connah.

#### **Toxicity Testing Results at SRS Wastewater Outfalls**

Don Gordon, WSRC, provided a presentation on toxicity testing challenges at SRS wastewater outfalls (see attachment). Biological toxicity testing is required in the National Pollutant Discharge Elimination System (NPDES) permit issued to SRS by the South Carolina Department of Health and Environmental Control (SCDHEC). The Whole Effluent Toxicity (WET) Test uses *Ceriodaphnia dubia* mortality and reproducibility rates to determine if the wastewater introduced into a stream meets toxicity requirements. SRS has experienced high rates of toxicity test failures using the WET Test. The failure rate is a violation of the limits specified in the 1997 NPDES Permit. In 1999, 7 of the 10 exceedances (at the A-01, A-11 and X-08 outfalls) were due to toxicity test failures. EPA is currently reviewing the enforcement action associated with these failures.

Mr. Gordon noted the following three SRS concerns with the WET Test: 1) the current test method may be inaccurate because SRS has performed analytical tests on the wastewater and hasn't detected any contamination that would be causing the toxicity failures; 2) the *C. dubia* species seems to be unable to reproduce and survive in the naturally soft waters of this region; and 3) the *C. dubia* species is not native to this area. Therefore, SRS is evaluating the use of another species of water flea that is found locally in farm ponds, *Daphnia ambigua*, and will conduct tests comparing the two species. The results of these comparison tests will be provided to EPA. Additionally, SRS will continue performing analytical tests to determine if the toxicity exceedances are resulting from specific contaminants, working with other companies and municipalities in this region that are experiencing the same problems using the current toxicity method.

Perry Holcomb presented the committee's draft motion (see attachment) requesting information regarding an Alternate Species Investigation Plan and Toxicity Identification Evaluations. The committee is interested in making cost comparisons and evaluating whether a proposed alternate species would be better suited for the WET test method. Bill Voegle moved the Board accept the motion and Ken Goad seconded. The motion passed with 20 members in favor, one opposed and no abstentions.

### **Waste Management Committee Report**

#### **Defense Waste Processing Facility Canister Storage Environmental Assessment**

Soni Blanco, DOE, provided an update on the Defense Waste Processing Facility Canister Storage Environmental Assessment (EA). Ms. Blanco explained that by 2005, the Glass Waste Storage Building will most likely run out of space; therefore, DOE is currently looking at alternatives. The current plan is to build a second glass waste storage building, however a parallel path is being pursued to study above ground dry storage using depleted uranium oxide (DUO) stored on site to manufacture above-ground storage casks. The use of DUO potentially could save money and distribute the cost of DWPF canister storage over a longer period of time compared to the significant up front investment for the construction of a second glass waste storage building, she said.

Georgia Leverett presented the committee's draft motion (see attachment) that DOE re-evaluate the scope of the EA. The motion recommended that before DOE decides on which approach (a second glass waste storage building or dry above ground storage) to take, they reassess the EA based on general and specific CAB comments. Many of the general comments focused on an escrow account and the ability of a vendor to revert disposal responsibility back to DOE. Wade Waters moved the Board accept the motion and Becki Gaston-Witter seconded. The motion was adopted by a vote of 19 in favor and one abstention by P.K. Smith due to her employment in the High Level Waste Division at SRS.

#### **High Level Waste Tank Closure Plan Revisions**

Larry Ling provided a brief update on the High Level Waste Tank Closure Plan Revisions (see attachment). This plan provides the general methodology for closing all the high level waste tanks and is required by the Wastewater Operating Permit. Approval of the plan is required from SCDHEC, EPA and DOE-Headquarters. The plan was recently revised to incorporate requirements from DOE Order 435.1, to

make it consistent with updated information in the HLW EIS, and to include the conclusion of the incidental waste review by the Nuclear Regulatory Commission. Public meetings were held May 22 and May 30. Final approval is expected in late 2000.

#### Alternative Salt Processing Technology

WM Committee Chair, Wade Waters, discussed the work of the Salt Processing Focus Group and the valuable contributions of Lee Poe, Mike French, Bill McDonell and other citizens who volunteer their technical expertise to CAB interests. Mr. Waters then introduced Howard Gnann, DOE, to provide an update on the salt processing project (see attachment). Mr. Gnann discussed the key elements of the technology development action plan, which calls for a draft Supplemental Environmental Impact Statement by January 2001, technology selection by June 2001, and a Record of Decision by October 2001.

Wade Waters presented an amendment to Recommendation 112 requesting that DOE develop a decision tree that outlines how DOE would address a schedule slippage in selecting an alternative salt processing technology. The goal would be to ensure that any schedule slippage would not affect HLW tank space needs, regulatory commitments, or other SRS activities. The CAB wants DOE to focus on selecting an alternative technology as quickly as possible, however the Board feels it is also imperative that potential impacts from delays be addressed as real possibilities and contingencies identified to avoid construction of new HLW tanks or delays in closing existing tanks. There was discussion regarding schedule changes and the desire of several members for the schedule not to slip. Mr. Gnann explained that DOE is going to spend more time in pilot scale testing and take time to design the facility. Bill Vogeles moved the Board accept the amendment to Recommendation 112 and Brendolyn Jenkins seconded. The amendment passed with 19 members in favor and two abstentions. P.K. Smith abstained due to her employment and Charleen Townsend abstained noting she could not make an informed decision.

#### Consolidated Incineration Facility

Ray Hannah, DOE, provided an update on the Consolidated Incineration Facility (see attachment). Mr. Hannah noted that CIF is in a scheduled outage for cleanout and discussed the following factors that led DOE to consider suspending operations:

- the high cost to treat Purex
- expected benzene and D&D waste hasn't materialized
- low level waste can be more cost effectively treated at the super compactor
- the backlog of waste due for treatment by 2009 can be handled if CIF were restarted in 2006

CIF is budgeted at \$20 million a year and treated 2100 gallons of Purex last year and will treat 3200 gallons this year. Mr. Hannah stated that DOE needs a more cost-effective approach. He stated that DOE is in the initial round of discussions with the regulators and noted that DOE would like to go forth with the suspension while holding the permit. He stated that more has to be learned about permitting implications and restarting the facility. He also noted that CIF could play a support role in complex equity issues, but this is not a driver for maintaining operations.

Wade Water presented a draft letter to Greg Rudy, DOE-SR Manager asking for more specific information regarding the status of CIF (see attached). The letter notes the Board's disappointment that evaluations were underway to determine the status of CIF without CAB involvement. By a show of hands, 19 members were in favor of forwarding the letter to DOE.

#### Transuranic Waste Vent & Purge Program

Dale Ormond, DOE, provided an overview of the Transuranic Waste Vent & Purge Program (see attachment). Mr. Ormond noted that the retrieval and venting of TRU drums was required to resolve a potentially significant safety problem and that not only had the project been conducted safely, it also was conducted for less costs than expected and completed ahead of schedule. Mr. Ormond discussed the history of the retrievably-stored TRU waste, which was generated and stored from 1974 until the mid-80s. He explained retrieval operations and then described the vent & purge operations showing many photographs. The overall results of the program were that 8,809 drums were retrieved and 11,260 vented with no personnel injuries or contamination events. Several million dollars were saved through schedule acceleration and innovation. Wade Waters stated that the SRS CAB commends DOE for the success of this program.

#### *Waste Isolation Pilot Plant (WIPP) Resource Conservation & Recovery Act (RCRA) Permit*

In response to the CAB's request to be kept informed on issues concerning the WIPP RCRA Part B Permit, Dale Ormond presented an update on the status of proposed modifications (see attachment). He explained how the miscertification rate modification for visual drum examinations will affect SRS, noting that the current requirement will force DOE to open an excessive number of TRU waste drums. This excessive number of examinations will not significantly increase waste characterization accuracy, but could significantly increase unnecessary risk to the worker's health and safety. In an earlier petition to the state of New Mexico, DOE had requested the State modify the RCRA Part B permit's TRU waste visual examination requirement from an assumed miscertification rate of 11 percent to one percent. This requested modification would provide some relief in the number of drums requiring visual examination after the initial inspections. Mr. Ormond discussed the visual exam process at length showing x-ray examples and photos of the visual exam facility and glovebox.

Lola Richardson presented the committee's draft motion which noted that as in previous recommendations, the SRS CAB remains concerned that the RCRA Permit for the Waste Isolation Pilot Plant requires too many visual and intrusive examinations to assay containers, which are unnecessary and pose a danger to SRS workers. The motion supports requested modifications to reduce the miscertification rate from 11 percent to one percent and recommended DOE request an additional modification to have the rate reduced to its originally proposed one percent rate. Following discussion, Bill Voegel moved the Board accept the motion and Bill Adams seconded. The motion was adopted with 17 members in favor and one abstention by Bill Willoughby who stated the miscertification rates should be tied to a national testing standard.

#### *SRS Health Effects Subcommittee*

Dr. Sergio Bustos, Chair of the Center for Disease Control SRS Health Effects Subcommittee (SRSHES), provided the SRS CAB an overview regarding the Subcommittee's activities. The SRSHES is one of four chartered committees established to identify the needs of exposed and potentially exposed communities. Members are selected by federal agencies and appointed for two-year terms. Due to recent budgetary restrictions, the SRSHES now meets only twice a year. Dr. Bustos noted disappointment in the lack of public involvement in their activities. He discussed a Dose Reconstruction Study where doses to the public were estimated using data from historical releases of radionuclides or chemicals to the environment. He discussed the extensive review by the SRSHES of this 1400 page study and noted future phases of the project.

#### *Strategic & Long Term Issues Committee Report*

S&LTI Committee Chair, Mel Galin, noted that Mr. Clay Jones' presentation regarding budget prioritization will be deferred until a special session in July. He also stated that the Committee had decided to leave Recommendations 120 and 121 open. Mr. Galin also commented that the SRS CAB may need to learn more about the dioxin problem in relation to incineration, noting that EPA has found

dioxins to be more of a problem and the Board may want to address this issue. He also noted that in light of the Los Alamos fire, the SRS CAB may want to learn more about SRS susceptibility to the same situation.

### **Administrative Committee Report**

The Administrative Committee Report was deferred until July due to the absence of the Committee Chair.

Karen Patterson stated that the SRS CAB Statement of Principles (see attached) had been approved by the Executive Committee and would be considered for approval by the full CAB in July. She also provided the EM SSAB Chairs Areas of Common Interest document (see attached) and noted that CAB members should only comment if they felt they could not support the document.

### **Public Comments**

No public comments were provided during the entire meeting.

### **Handouts**

May 23, 2000 Meeting Agenda  
Operations Update, May 2000  
SRS CAB Annual Work Plan, Third Draft, dated May 15, 2000, Mike Schoener  
SRS CAB Recommendation Summary Report, Mike Schoener  
Surplus Plutonium Disposition, Charlie Anderson, DOE  
Total Maximum Daily Load for Mercury in the Savannah River Basin, Bill Payne, WSRC  
Total Maximum Daily Loads, Jimmy Mackey, CAB  
Toxicity Testing Challenges at SRS Wastewater Outfalls, Don Gordon, WSRC  
Whole Effluent Toxicity Testing Impacts on SRS Wastewater Outfalls, Perry Holcomb, CAB  
Defense Waste Processing Facility Canister Storage EA Update, Sonitza Blanco, DOE  
WM Working Draft Motion #2, DWPF Canister Storage, Georgia Leverett, CAB  
High Level Waste Salt Processing Project Path Forward, Howard Gnann, DOE  
WM Draft Amendment, Recommendation No. 112 Amended, Wade Waters, CAB  
SRS High-Level Waste Tank Closure Plan Revisions, Larry Ling, DOE  
Consolidated Incineration Facility, Ray Hannah, DOE  
Letter to Greg Rudy dated May 23, 2000 regarding CIF status  
Letter to Bill Richardson from Oak Ridge SSAB, dated May 4, 2000  
Transuranic Waste Update, Dale Ormond, DOE  
Transuranic Waste Update: WIPP RCRA Permit Modification on TRU Drum Visual Exam, Dale Ormond  
WM Working Draft #3, WIPP RCRA Permit Modification, Lola Richardson, CAB  
SRS Prioritization Process, Clay Jones, WSRC  
SRS CAB Fiscal Year 2000 Budget Summary  
SRS CAB Mission Statement  
SSAB Chairs Statement, Final Draft  
Letter to Karen Patterson from SCDHEC, dated May 19, 2000  
Monthly NEPA Report  
SRS CAB Activity Calendar

*Approved July 25, 2000*

***For copies of meeting handouts call 1-800-249-8155.***