SRS Citizen's Advisory Board

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Combined Committees Meeting

Meeting Summary

November 13, 2001
Embassy Suites
North Charleston, SC

The following were in attendance at the November 13, 2001, Combined Committee meeting of the Savannah River Site (SRS) Citizens Advisory Board (CAB) held at the Embassy Suites in North Charleston, SC.

CAB Members	Stakeholders	DOE/Contractors
David Adcock	Melinda Holland	Greg Rudy, DOE
Meryl Alalof	Leon Chavous	Tom Heenan, DOE
Nancy Ann Ciehanski	David Ruth	Becky Craft, DOE
Beckie Dawson	John Angil	Gerri Flemming, DOE
Gerald Devitt		Thomas Johnson, DOE
Mel Galin		Ray Hannah, DOE
Ken Goad	**Regulators**	Dale Ormond, DOE
Perry Holcomb	Keith Collinsworth, SCDHEC	Bill Spader, DOE
Brendolyn Jenkins	Don Siron, SCDHEC	Nick Delaplane, DOE
Vera Barnes Jordan		Dave Amerine, WSRC
William Lawrence	**SCDHEC** - South Carolina	Howard Walls, WSRC
J.G. Long	Department of Health and	Bob Steadman, WSRC
Jimmy Mackey	Environmental Control	Virginia Dickert, WSRC
Karen Patterson	**DOE** - Department of Energy	Tor Osmundson, WSRC
Maria Reichmanis	**WSRC** - Westinghouse Savannah	Cassy Robinson, WSRC
Lola Richardson	River Company	Teresa Haas, WSRC
Murray Riley		Jim Moore, WSRC
Heather Simmons		Dawn Haygood, WSRC
Marty Stringer		Helen Villasor, WSRC
Jean Sulc		Kelly Dean, WSRC
Wade Waters		Paul Sauerborn, WSRC
Carolyne Williams		Sonny Goldston, WSRC
Bill Willoughby		Mike Schoener, CAB

SRS CAB Members, Sallie Connah and Bill Vogele were not in attendance.

The objective of the meeting was to hear various presentations provided by committees and two special presentations regarding the Environmental Management Top-to-Bottom Review and Savannah River Technology Center assistance in New York City.

Waste Management Committee:

Wade Waters opened his committee report by changing the status of the following recommendations from "pending or open" to "closed": 118, 137, 131, 130, 124, and 125. He then introduced Dale Ormond, DOE, Waste Operations Division, to provide a Transuranic (TRU) Waste Program Review.

SRS Transuranic (TRU) Waste Program Status

Dale Ormond, DOE, opened his presentation by providing the FY01 Accomplishments. SRS obtained Waste Isolation Pilot Plant (WIPP) certification by New Mexico and the Environmental Protection Agency (EPA) and was the first DOE site to pass its initial audit. SRS has sent seven TRU waste shipments to WIPP for disposal. In addition, SRS has initiated the Carlsbad Central Certification Project (CCP) at SRS to accelerate TRU waste disposal. This project passed its Carlsbad, New Mexico Environmental Department (NMED) and EPA audit with four corrective actions, and certification is expected in January or February.

Mr. Ormond showed pictures of the different TRU Waste Storage Pads, explaining their locations, contents, and functions. He continued by explaining the Accelerated TRU Waste Disposal Initiative. SRS will first accelerate the TRU waste shipments to WIPP and then transfer the Mound waste to SRS for interim storage, which would allow earlier closure of the Mound site. SRS has thus far received the first shipment from Mound in September via a retrofitted Department of Transportation licensed OHOX railcar. This first shipment of 53 TRU waste drums was very successful, and the next shipment is expected in March 2002.

Mr. Ormond went on to explain the Low activity TRU facility (LATF), which is to house and demonstrate the handling and drum segregation system for 55-gallon drums (HANDSS-55 system). This system is designed to open the drums remotely, inspect the contents, and repackage the 55-gallon TRU waste drum. Installation and testing is scheduled to begin October 2003 and be operational by October 2004. Mr. Ormond continued by discussing the High Activity TRU Facility (HATF). This facility will be designed to process and package the SRS waste that cannot be sent to WIPP, specifically the PU-238 waste and large pieces of equipment. The project is slated to begin in FY02 and be fully operational in FY15.

Jimmy Mackey asked for clarification of the transportation issues and emphasized the need to involve the citizens in the towns through which the waste would pass. Mr. Ormond outlined the detail required to ship the waste. He added that the Site is shipping again after halting shipments when the US World Trade Center was attacked and when the United States attacked Afghanistan.

CAB Recommendation 141-Consolidated Incineration Facility

Ray Hannah, DOE, provided an update on Recommendation 141, which recommends that DOE develop a plan that allows the CIF to remain an option until an alternative is demonstrated for Site PUREX waste treatment. He gave the CIF background and stated that by April 1, 2002, the Site must decide to either pursue an alternative treatment for PUREX and close CIF by November 2002 or restart CIF. Mr. Hannah said that prior to April 1, 2002, if sufficient justification exists for an extension, the Site may submit a permit modification request to the SCDHEC. Mr. Hannah stated that the current plan is to pursue and evaluate viable alternative treatment options, to develop information that would provide sufficient justification for DHEC to extend the closure date, and to

continue discussions with the regulators. All of these activities must be accomplished in a time frame to support the decision date of April 1, 2002.

Mr. Hannah stated that since CIF suspension, the Site has continued to develop lab-scale testing of treatment options. The CIF optimization study was completed and information has been developed that provided sufficient justification for extending the CIF closure date. A draft closure plan to submit to SCDHEC has been developed. He concluded by stating that funding is available in FY02 to continue treatment option development. If closure activities are required in FY02, then the program will follow Site funding protocol.

Perry Holcomb asked if a report of the technology options would be forthcoming, and Mr. Hannah said that SRTC is writing this report. It was determined that the terms in this recommendation have been met, and that Recommendation Number 141 can be closed.

<u>High Level Waste Tank (HLW) Space Management</u>

Virginia Dickert briefed the committees on tank space management. She began by outlining the HLW mission: to manage high level waste, to remove waste from tanks, to immobilize HLW into safer waste forms, either grout or glass, and to close the HLW tanks. Next she outlined some of the elements of space management that HLW has implemented. The Defense Waste Processing Facility (DWPF) recycle volume has been reduced. Evaporation has helped reduce volume. Tank 49 has been returned to service and Tank 50 is scheduled for return to service in August 02. The plans to convert Tank 37 to a concentrate receipt tank for the 3H Evaporator are on schedule for fall '02.

The space management plan is documented in the HLW System Plan, Rev. 12, has been validated through two independent scientific peer review (ISPR) teams, and is monitored through a two-year rolling window schedule/chart that the HLW group updates weekly.

Ms. Dickert showed the group one of the charts used as a performance measure of Type III tank space management. This line chart illustrates how much space is necessary to meet HLW system Plan Rev. 12, how much space is necessary for optimal system flexibility, the current projection, and the actual working inventory. She illustrated how transfers from non-compliant tanks earlier than scheduled allowed much needed flexibility.

She finished her presentation with the current system status. All evaporators are operational. The DWPF has exceeded production goals for the 5th straight year. Sludge batch 2 will be ready in December, Tank 49 is available and being used for other material, and she has tank space above the levels recommended by the ISPR team.

Concerning salt processing, HLW is evaluating processing low Curie salt from tanks 41, 25, 27, 28, and 38 and is demonstrating actinide removal. The goal is to empty more tanks, faster and to continue immobilization by vitrification and grout.

Mr. Mackey requested that the CAB be provided with the number of slots available in the present Glass Waste Building and the date a new building would be needed. Ms. Patterson questioned the line chart and if down time with the evaporators was factored into the line graphs. Ms. Dickert answered that historical data from the 2F and 2H evaporators was used and that projected numbers were used with the 3H evaporator. However, she feels confident that these numbers are in alignment.

Ms. Dickert then outlined the next steps to determine if processing the low-curie salt in five tanks is a viable tank space management option for the committees. She plans to form a dedicated program/project team. She plans to develop a material balance and scope of modifications, a

detailed cost estimate and schedule, and to begin Waste Incidental to Reprocessing (WIR) development. She intends to maintain communication with her customers, stakeholders, regulators, and the technical community. She believes that a detailed update can be provided to the CAB and/or committees in 3-6 months. Mr. Waters asked that Ms. Dickert come back to the April '02 meeting with an update on tank space management.

Strategic & Long Term Issues Committee:

Emergency Transportation of Hazardous Material

Mel Galin, Chair of the S&LTI Committee, introduced David Ruth, Aiken County Emergency Preparedness Coordinator, and John Angil, Barnwell County Emergency Management Director.

John Angil and David Ruth teamed up to make the presentation. They stated that a joint effort in assessment, training and exercise is conducted periodically, the latest starting in June 2000. This effort was an Aiken Barnwell Transportation Emergency Preparedness Program (ABTEPP) and the exercise occurred on March 10, 2001. It provided training in incident command system, response to radioactive material incidents, mass casualty and bus extrication. 215 responders were trained. Three tabletop drills were conducted utilizing the Windsor and Williston Fire Departments and the Aiken County Hazardous Materials Team. The exercise included a Spent Fuel shipment truck with fire, a school bus, mass casualty (18 victims of which 6 were fatalities) with 11 victims transported to the Barnwell hospital. Strengths and improvement areas of the exercise were evaluated. Areas for improvement included incident location and route of response communication could be improved, need to adopt and implement a standardized county wide responder accountability system, and the recognized need to wear personal protective equipment while conducting rescue operations. It was noted that because old volunteers leave and new volunteers join the Fire Departments, training is a continuing process.

Accomplishments from the ABTEPP effort were the development and expanded working relations between all emergency response organizations, improved responder preparedness, raised community awareness of responder capabilities and improved communications between counties. A video tape of the ABTEPP exercise was viewed.

Previous training included response to radiological transportation incidents including incident command system, bus extrication, blood borne pathogens, radiological emergency transportation, local responder and mass casualty. Scenarios included a downed aircraft, tornado touchdown with structural collapse, four radiological transportation incidents and emergency operations center activation.

The South Carolina House of Representatives and the State of South Carolina recognized the high level of cooperation of both Aiken and Barnwell Counties.

Current activities include development of a weapons of mass destruction plan with USC-Aiken and a county-wide weapons of mass destruction exercise. Further information on the above exercise can be seen on the Hazardous Materials Team web site www.hazmatteam.com.

The local jurisdiction/incident commander is in charge of all emergencies. As their resources are taxed, they can request resources from the State. As State resources are taxed, Federal agencies are asked to help. This is a very formal process and works well.

Mel Galin requested that Mr. Angil and Mr. Ruth send a letter to the CAB informing the CAB of areas that need improvement within the emergency management system.

Strategic & Long Term Issues Committee Update

Mel Galin stated that a tour of both the Savannah River Technology Center (SRTC) and the Savannah River Ecology Laboratory (SREL) would take place on January 8, 2002. CAB members should let a member of the Public Involvement staff know by December 14 if they plan to attend. Mr. Galin stated that the CAB needs to be informed earlier in the technology process. Technology needs to be integrated with the rest of the CAB work.

Mr. Galin said 15 people participated in the videoconference Stewardship Subcommittee held on November 6. The CAB has an opportunity to participate in several stewardship activities. By November 28, CAB members needed to get input to Jim Moore on the process and stewardship goals and objectives for the DOE-Headquarters public input on the DOE-Headquarters Long Term Stewardship Strategic Plan. In addition, in early 2002, the draft SRS Strategic Plan will be available for review and comment. Mr. Galin said that Oak Ridge has done some early work on stewardship and it would be worthwhile to have a videoconference with Oak Ridge people to learn more about their effort. The Consortium for Risk Evaluation and Stakeholder Participation (CRESP) also has a focus on stewardship. A joint meeting between the Stewardship Subcommittee and the S&LTI Committee will be held to hear from CRESP about stewardship efforts at other DOE sites and DOE-Headquarters. Mr. Galin said he had a letter from Jessie Roberson on the seven DOE-Headquarters long term stewardship principles which he will distribute to the CAB members.

EM Top-to-Bottom Review:

Greg Rudy, DOE-SR Manager, discussed the Top-to-Bottom Review Process, an initiative of Assistant Secretary for Environmental Management Jessie Roberson. He emphasized that it is not about cutting costs but about doing the right thing. Mr. Rudy discussed re-energized site efforts with negotiation of the DOE-WSRC contract extension, which was initiated in the summer of 2000 and noted Secretary Abraham's directive to identify ways to reduce the cost and schedule for the EM program. SRS re-doubled efforts on its internal program in May in lockstep with the Secretary's vision and the new WSRC contract objectives, he said. Mr. Rudy noted that dozens of areas are being reviewed to identify better approaches. He said that SRS personnel are asked to respectfully challenge themselves, to liberate their minds and think outside the box. Mr. Rudy and Bob Pedde, WSRC President. own this initiative personally and meet weekly with key line managers to discuss areas where they can make a difference and where they are coming up against walls, said Rudy.

Mr. Rudy discussed several examples of innovative ways to reduce costs and schedule. He noted that plutonium stabilization in existing facilities makes more sense than building a new facility and that with modifications, facilities in F Area could be used. He noted that by breaking down the issues or problem into smaller pieces or quantities, SRS has found ways to address the situation. He noted spent fuel melt and dilute and the Americium/Curium project as examples. Stabilizing americium/ curium through the high level waste system will save not only time but millions of dollars, while allowing us to keep this material for science if needed, he said.

Mr. Rudy noted several other examples emphasizing that SRS is constantly looking at new ways to reduce costs and meet objectives. Mr. Rudy noted that the Inspector General will look at the EM Program to see if everything is accounted for and stressed that the top-to-bottom initiative must maintain credibility. The focus is on avoidance, the need to avoid costs, wastes, etc…Mr. Rudy concluded that enhanced operational performance is key, getting more production for the money.

Issues for Consideration in 2002

Tom Heenan, DOE-SR Assistant Manager for Environment, Science & Technology Program, provided a presentation that expanded on Mr. Rudy's remarks. He discussed the following list of

initiatives being considered within the EM Top-to-Bottom review broken down by committee for consideration by the CAB:

Environmental Restoration Committee:

- **Alternate Burial Ground Complex (ABGC) Remediation**
- **Dynamic Underground Stripping for the A/M Areas**
- **Enhanced Bioremediation using Microenfractionation**
- **Remediate Solvent Tanks**
- **ABGC Cap in Place in Lieu of Spot Evacuation and Transport (Start Field Work 4/04)**
- **F Groundwater Treatment Unit Base Injection**

Waste Management Committee

- **Replace B-25 Waste Containers with Soft-Sided Bags**
- **Alternative Disposal of Pu-238 Transuranic Wastes**
- **SCDHEC-Revise HLW Water Treatment Permit**
- **Order 435.1- Removal of radionuclides from HLW Tank**
- **Order 435.1- Removal of Cesium as key radionuclide**
- **Salt Processing Dual Path Approach**
- **Alternatives for Glass Waste Storage Facility**
- **Eliminate Waste Streams to Tank Farms**

Strategic & Long Term Issues Committee

- **Financial/Uncosted/Encumbrance Opportunities**
- **40 CFR 70 -CAA Title V Operating Air Permit**
- **40 CFR 122 -CWA NPDES Permit Renewal**
- **Decision on 26 Potential Requirements Initiatives having less than $1 million each**

Nuclear Materials Committee

- **235-F Project & Alternative Path Forward**
- **F-Canyon Utilization**
- **SRTC Tank Farm Modifications**
- **HB-Line Phase II**
- **Alternate Tech/Aluminum Clad Fuel Stabilization**
- **DNFSB 2000-2 Phase II Assessments**
- **Further Acceleration of RBOF Deinventory**
- **Two Man Rule Requirements in K, L Areas**
- **MC&A Requirements in KAMS**
- **HEU Blend Down Project**

In the interest of being thorough, Mr. Heenan also presented the following initiatives that fall outside the realm of the CAB:

Other Initiatives

- **Order 460.1A- Packaging and Transportation of Onsite Radioactive Materials**
- **RCM-Revised Contamination Reporting Requirements**
- **RCM- Graded Routine Survey Frequency**
- **O 471.1A-UCNI Identification and Protection**

- **Change of Plutonium Security Requirements**
- **Vehicle Fleet Reduction**
- **Investigate Commercial Contracting Opportunities**
- **Steam Supply**
- **10 CFR 830-Evaluate AB Techniques**
- **Order 433.1-Revisit HQ FIMS decision**
- **Eliminate Requirements to Test HEPA Filters at Filter Test Facility**

Above and beyond the EM Top-to-Bottom Review, Mr. Heenan also presented other issues for consideration by the CAB in 2002, many of which were a continuation of programs previously addressed by the board. He concluded by noting several successes of the CAB and SRS in 2001 and emphasized that the relationship between SRS and its stakeholders was key to this success.

SRTC Assistance in New York:

Cassy Robinson of the Savannah River Technology Center Emergency Assistance Team provided a presentation regarding the team's assistance in New York following the tragedy of September 11, 2001. She provided background information of how SRTC became involved in law enforcement. Two Memoranda of Understandings and an Interagency Agreement were signed in 1998 and 1999 with the Department of Justice and the Federal Bureau of Investigation to provide nuclear forensic support and establish a technical partnership. Over 100 arrests and convictions have resulted in this partnership since 1998. Ms. Robinson discussed the chronology of deployment of the team to New York. The team was packed and had departed within four hours of a request from the National Institute of Justice. The principal mission of the SRTC team was to deliver rugged, fieldable instruments and tools to assist the technical support function for the urban search and rescue teams, the New York Fire Department and the National Transportation Safety Board. The team provided onsite technical expertise for rapid design, fabrication, testing and training in the use of specialty tools for specific search requirements.

Approximately $500,000 worth of SRS equipment was transported to New York City. All equipment was returned to the site except equipment purchased by the National Institute of Justice while in New York City. Only one $300 camera was damaged. Ms. Robinson discussed the assistance team's commitment to safety, their arrival in New York, their co-location with FEMA Pennsylvania Task Force 1, which was deployed from 2-World Financial Center. Ms. Robinson showed many photos depicting the damage in New York and discussed the technical support provided including infrared radiometer, the Riley cam, drop cameras, pole cameras and surveillance cameras, all of which were used in an attempt to locate victims in the debris (note that very few bodies have been found so we should say it was tried, but that there were no victims to be found).. Ms. Robinson concluded by noting all the support agencies provided to the SRTC assistance team. She also emphasized the emotional support provided to all rescue workers.

Environmental Restoration Committee:

Jimmy Mackey began his section of the meeting by acknowledging Keith Collinsworth (SCDHEC) as being very supportive of his Committee and questioned EPA's support due to their lack of attendance at this and other committee meetings. Mr. Mackey announced that the Savannah River Fish Fact Sheet is complete and available at the table in the back of the meeting room and that if additional copies were desired to contact either Mr. Mackey or Paul Sauerborn. Mr. Mackey stated that he would be updating the status of CAB Recommendations with his committee before the next full Board meeting, which is scheduled for January 15, 2002.

Environmental Restoration End of Year Review

Thomas Johnson, Senior Technical Advisor Department of Energy – Savannah River Environmental Restoration Division stated that the key messages of his presentation are as follows:

- **SRS continues to make significant site progress in environmental restoration through innovative technologies and cost effectiveness**
- **Risk reduction continues to be a major objective**
- **40% of the ER sites have been reduced to minimal risk through closure or completion**
- **Groundwater plume management remains a priority**

Mr. Johnson presented descriptions of the many accomplishments during the year including the following:

- **Tritium Remediation**
    - **Mixed Waste Management Facility (Southwest Plume)**

      Phytoremediation (Interim Measure) in Operation
    - **C-Area reactor Groundwater**

      Phytoremedeation in Planning Stages
- **Solvent Remediation**
    - **A/M Area Groundwater Plume**

      Dynamic Underground Stripping Complete at Solvent Tanks Storage Area

      Conventional Remediation Methods in Operation
    - **Non-Radioactive Disposal Facility**

      Bioremediation Ahead of Cleanup Schedule
- **Radionuclides in Soil Remediation**
    - **SRL Seepage Basin**

      Soil Disposal and Remedial Action Complete
    - **Completed construction startup and operation at the A-Burning Rubble Pit Unit**

      10 air sparging and 30 Passive Soil Vapor Extraction (SVE) wells, soil cover
    - **Completed construction activities at the Miscellaneous Chemical Basin/Metals Burning Pit**

      Soil removal, SVE unit, 10 recirculation wells
    - **Completed Phase II characterization at the D-Area Expanded Operable Unit**

- **L-Area Oil and Chemical Basin**

  In-situ grouting complete; remedial action complete

- **F-Area Retention Basin**

  In-situ grouting complete; remedial action complete

- **K-Area Reactor Seepage Basin**

  In-situ grouting complete; remedial action complete

- **C-Area Reactor Seepage Basin**

  In-situ grouting in progress; completion expected FY02

Mr. Johnson stated that the Integrator Operable Unit Workplans are continuing as scheduled. The last workplan is scheduled for August of FY02. The IOU Workplans identify early actions for each IOU as well as future data needs. Its impact on OU's would be to advise the project teams of the need for reprioritization of the OU's within a given IOU. In conclusion, Mr. Johnson stated that the SRS has received the Voluntary Protection Program Star Status which places the site on top of safety across the DOE complex. Also, noted was the excellent safety record of the Environmental Restoration Program with over 3.5 years without a lost workday reported case.

The meeting adjourned at 3:30 p.m.

Handouts may be obtained by calling 1-800-249-8155.