Savannah River Site Citizens Advisory Board Meeting Minutes May 19 - 20, 2008 Savannah, GA

Monday, May 19, 2008, Attendance

SRS CAB Members	Agency Liaisons	DOE/Contractors
Donna Antonucci	Patrick McGuire, DOE	Helen Belencan, DOE
Manuel Bettencourt	Al Frazier, GADNR	Gerri Flemming, DOE
Donald Bridges	Robert Pope, EPA	J. D. Chiou, SRNS
Edward Burke	Shelly Sherritt, SCDHEC	Nancye Bethuren, WSRC
Leon Chavous	-	Ginger Dickert, WSRC
Art Domby	Regulators	Mary Flora, WSRC
Mary Drye	Heather Cathcart, SCDHEC	Sonny Goldston, WSRC
Alan Eckmyre	Carolyn Haugabook, EPA	John Long, WSRC
Mercredi Giles	Duke Taylor, SCDHEC	Steve Thomas, WSRC
Kathe Golden	Jim Barksdale, EPA	Jenny Freeman, V3
Judith Greene-McLeod		Rick McLeod, V3
Stanley Howard	<u>Stakeholders</u>	Mindy Mets, V3
Ranowul Jzar	Tom Clements	Andrea Pelham, V3
Madeleine Marshall	Marolyn Parson	Debbie Wisham, V3
Joe Ortaldo	Laura Walker	Tiajuana Cochnauer, USFS-SR
Skyye Vereen	Gary Zimmerman	
Sarah Watson		

The Savannah River Site (SRS) Citizens Advisory Board (CAB) Facilitator, Jenny Freeman opened the meeting by reviewing the agenda. She invited public participation and asked that anyone wishing to make a public comment should sign up on the request sheet to be acknowledged during the public comment period of the meeting. In addition, she stated an Executive Committee meeting will follow the combined committee meeting and a P Reactor Workshop will be held later in the evening.

CAB Members not in attendance were Lee Harley-Fitts, Kuppuswamy Jayaraman, Denise Long, Wendell Lyon, Beverly Skinner, and John Roberson.

Waste Management Committee, Joe Ortaldo - Chair

Art Domby – Vice Chair (Liquid Waste) Alex Williams – Vice Chair (Solid Waste)

Alex Williams

Committee Chair Joe Ortaldo stated that the Waste Management committee held a meeting on April 15, 2008. He updated the group on the status of the committee's 13 open recommendations stating he expects 8 to be closed soon. In addition, he stated that Recommendation 179, which addresses the Waste Solidification building for the Mixed Oxide (MOX) Facility, can be closed if the motion submitted during Monday's meeting is approved by the full board.

Mr. Ortaldo stated that in mid April the Interim Salt Processing using the Actinide Removal Process/Modular Caustic Side Solvent Extraction Unit (ARP/MCU) started which is a significant accomplishment at SRS. He said that during the June 24th meeting he expects an update on the ARP/MCU from DOE. Mr. Ortaldo summarized the April 15, 2008 committee meeting in which joint discussions were held by the DOE-Headquarters; DOE-Savannah River; and Regulators who provided updates on the activities occurring in the Section 3116 implementation. He stated that detailed minutes of committee meetings can be viewed on the CAB website. Mr. Ortaldo presented the committee's draft motion:

<u>Draft Recommendation Motion – Potential Waste Solidification Building (WSB) Cost Savings</u> *Entire Recommendation can be reviewed on the CAB Website* The Waste Solidification Building (WSB) is a stand-alone structure, which will receive liquid waste through underground transfer lines from the Mixed Oxide Fuel Fabrication Facility (MFFF) the Pit Disassembly and Conversion Facility (PDCF). The WSB will take the high activity and the low activity liquid waste streams from MOX and the PDCF and process the waste stream by evaporating, neutralizing, and cementation into packages before preparing it for disposal. The WSB will produce Transuranic (TRU) and low-level waste (LLW) cement-based solid waste forms acceptable for shipment and disposal. The TRU waste form will be transported to the E-Area Savannah River Site Waste Management Area Project – Solid Waste, for ultimate shipment to the Waste Isolation Pilot Plant (WIPP) for permanent disposal. The LLW waste form will be transported offsite for disposal, although onsite disposal in E-Area could be considered if the waste meets the acceptance criteria. In addition, the WSB will transfer low-level liquid waste to the SRS Effluent Treatment Facility (ETF) through an underground pipe connected to an existing transfer line for treatment and discharge.

The WSB needs to be operational to support the start of cold testing at the MFFF in 2013. The design effort for the WSB was suspended in 2004. The design effort recommenced in late 2006 with an estimated total project cost of \$245 - \$330 million.

On November 18, 2003, the Savannah River Site (SRS) Citizens Advisory Board (CAB) approved a recommendation related to the Inspector General's Audit Report on the WSB. At that time, the estimated cost for the WSB was \$58 million and construction was to begin in December 2004. The SRS CAB agreed with the report's finding that there was a lack of coordination between the National Nuclear Security Administration (NNSA) and DOE's Office of Environmental Management (EM) related to the treatment and ultimate disposal of waste from the MFFF and PDCF processes. The SRS CAB recommended that the two organizations resolved the issues of the WSB waste streams and improve communication related to overlapping responsibilities.

The SRS CAB now understands that the WSB estimated cost is between \$245 and \$330 million. In addition, EM will have a longer presence at SRS than originally anticipated. Previously, EM's cleanup completion was 2019 at which time its landlord and waste missions was to have diminished and NNSA take more of an active landlord role. However, the EM mission is now projected to last until 2031 and the SRS CAB believes there may be considerable savings for the taxpayer if existing waste facilities could be utilized instead of building the new WSB.

The SRS CAB recommends that by July 29, 2008, DOE:

- 1. Identify existing/planned EM waste treatment capabilities suitable for use or modification to satisfy the Waste Solidification Building (WSB) capabilities and report these findings to the SRS CAB.
- 2. Prepare a cost benefit analysis documenting overlapping capabilities, cost saving potentials (if any), and reassurance for the need to construct and operate the WSB.

Mr. Ortaldo summarized the motion and opened the floor for questions and comments. Minor editorial changes were noted by CAB Members.

Mr. Tom Clements asked if the NNSA EIS process was taken into consideration and was there discussion of this at the meeting in April. He said the motion appears more financially driven than environmental protection driven. He stated it appears the resolution is lacking information.

Patrick McGuire, DDFO, stated that NNSA projects are outside of this Board's scope as a reminder to members.

Mr. Ortaldo commented that the motion's intention is to save taxpayers money. Other CAB Members stated they want the two institutions (EM & NNSA) to work together to look for cost saving possibilities.

<u>Nuclear Materials Committee</u>, Manuel Bettencourt - Chair Judith Greene McLeod – Vice Chair

Committee Chair Manuel Bettencourt reported that the Nuclear Materials committee has four open recommendations that are pending DOE-HQ decision on the three pronged approach to the plutonium vitrification. He said that during the joint committee meeting in April, DOE briefed the group on the status of the Depleted Uranium Oxide inventory, storage conditions, and disposition activities.

Strategic and Legacy Management (S&LM) Committee, Madeleine Marshall - Chair

Committee Chair Madeleine Marshall started by welcoming the new members who signed up for the S&LM Committee at the March meeting. She stated that a full presentation on the Certified Baseline will be presented at the full board meeting tomorrow. In addition, she said the group will hear a presentation on the Contract Transition.

Facilities Disposition & Site Remediation Committee, Mary Drye - Chair

K. Jayaraman – Vice Chair

Committee Chair Mary Drye reported that a P-Reactor Workshop will be held from 5:30 to 7:30 p.m. this evening and she invited and encouraged everyone to attend. She said that it is the third workshop held in response to Recommendation 248 which has been closed.

Administrative Committee, Sarah Watson – Chair

Committee Chair Sarah Watson reported that the Website has been updated with new CAB Members, meeting summaries, and pictures. She also stated that members received additional material for their member notebooks. She said the membership solicitation campaign will begin in late summer.

Public Comments

No Public Comments

Meeting adjourned at 4:00 p.m.

Tuesday, May 20, 2008, Attendance

SRS CAB Members	Agency Liaisons	DOE/Contractors
Donna Antonucci	Patrick McGuire, DOE-SR	Jeffrey Allison, DOE-SR
Manuel Bettencourt	Al Frazier, GADNR	Helen Belencan, DOE-SR
Donald Bridges	Shelly Sherritt, SCDHEC	Gerri Flemming, DOE-SR
Edward Burke		Doug Hintze, DOE-SR
Leon Chavous	Regulators	Larry Ling, DOE-SR
Art Domby	Heather Cathcart, SCDHEC	Wade Whitaker, DOE-SR
Mary Drye	Jim Barksdale, EPA	Ginger Dickert, WSRC
Alan Eckmyre	Carolyn Haugabook, EPA	Mary Flora, WSRC
Mercredi Giles	Thomas Rolka, SCDHEC	Dave Freeman, WSRC
Kathe Golden	Duke Taylor, SCDHEC	Sonny Goldston, WSRC
Judith Greene-McLeod		Steve Thomas, WSRC
Stanley Howard	<u>Stakeholders</u>	J. D. Chiou, SRNS
Ranowul Jzar	Tom Clements	Bruce Schappell, BSRI
Madeleine Marshall	Glenn Carroll	Jenny Freeman, V3
Joe Ortaldo	Beckie Gaston-Daws	Rick McLeod, V3
Skyye Vereen	A. Howard	Mindy Mets, V3
Sarah Watson	Marolyn Parson	Andrea Pelham, V3
Alex Williams	Laura Walker	Debbie Wisham, V3
	Gary Zimmerman	Tiajuana Cochnauer, USFS-SR

SRS CAB members Lee Harley-Fitts, Kuppuswamy Jayaraman, Denise Long, Wendell Lyon, Beverly Skinner, and John Roberson were unable to attend. CAB Member Leon Chavous led the Pledge of Allegiance. Patrick McGuire, DOE-SR, served as the Deputy Designated Federal Official. Jenny Freeman served as Facilitator and Rick McLeod was present as the CAB's Technical Advisor. The meeting was open to the public and posted in the *Federal Register* in accordance with the Federal Advisory Committee Act.

Approval of the Minutes

Minutes from the March 19-20, 2008 Full Board meeting were approved by the CAB with no changes.

Agency Updates

Department of Energy

Mr. Jeffrey Allison, Manager DOE-SR expressed his appreciation for the work of the CAB and welcomed new CAB members appointed during the last CAB meeting where he was unable to attend. He encouraged new members to actively engage in CAB committees. Mr. Allison stated the value to DOE of having a public perspective. He explained his commitment to attend CAB meetings, to listen, and to answer questions.

Mr. Allison addressed transition of the Management and Operating (M&O) contract that was awarded to Savannah River Nuclear Solutions (SRNS). He explained that transition started on May 2 and is a 90-day period where the outgoing contractor, WSRC, and DOE-SR work with the new contractor, SRNS, toward the change. On August 1, SRNS will take over management. He emphasized the importance of safety during the transition process. Mr. Allison described the transition and stated that it is going well.

In addition, Mr. Allison discussed the Liquid Waste contract, stating that bids were received in December 2007. The Department is evaluating the bids, has had one interaction with each contractor and anticipates contract award by the end of October 2008.

Lastly, Mr. Allison explained his recent focus on conveying significant accomplishments at SRS. He discussed the importance of the talented workforce and proper use of technology at SRS in recent years. He cited examples of SRS using smart solutions to affect clean-up in the DOE complex, including achievements in the areas of liquid waste and soil and groundwater cleanup. He also highlighted the positive relationship and good dialogue with regulators at SRS.

Patrick McGuire, DOE-SR Deputy Designated Federal Officer (DDFO) to the CAB, continued with the DOE update. He began by discussing the safety culture at SRS and shared information regarding two safety topics - extension cords and heat stress. Mr. McGuire continued with the following information:

Salt Waste Processing Facility (SWPF) Project Status

The SWPF Project will provide the capability to disposition salt waste. Currently, SRS is continuing with site preparation activities including storm drain piping, electrical grounding grids, and excavating the foundation for the administrative building. Limited Facility Construction Authorization is expected to be obtained in June 2008 and the final design work is expected to be completed by September 2008. The project is on schedule to be operational by November 2013.

Actinide Removal Process (ARP) and Modular Caustic Side Solvent Extraction Unit (MCU)

Until the SWPF is operational, interim measures are in place. The Actinide Removal Process (ARP) and Modular Caustic Side Solvent Extraction Unit (MCU) provide salt processing. The current status includes:

- March 31, 2008, Jeff Allison granted approval to start-up ARP and MCU.
- Mid April 2008 radioactive waste was transferred to the ARP process.
- May 1, 2008 radioactive waste was introduced to the MCU process.
- May 5, 2008 the salt solution was transferred to the Defense Waste Processing Facility, marking a major accomplish demonstrating the site's commitment and capability to process salt waste.

Plutonium Disposition (PuD) Project

Currently, SRS has a three-prong approach for dispositioning Plutonium (Pu). This involves the Mixed Oxide Fuel Fabrication Facility (MOX), H-Canyon facility and building a new vitrification capability.

Recently, the site underwent an alternatives analysis to see if developing a vitrification plant is the best option. The three-pronged approach is being re-analyzed based on the status that H-Canyon is capable and operational through 2019, and recognizing that H-Canyon can disposition more than 2 metric tons of Plutonium. Also MOX has documented the ability to accommodate close to 8 metric tons of Plutonium. Results of the alternatives analysis are being evaluated. A decision is expected from the Deputy Secretary in the June/July timeframe.

Continuing Plutonium and Uranium receipts and disposition at the SRS

SRS is continuing to receive the surplus non-pit Plutonium from various sites across the DOE complex which will amount to about 13 metric tons, including what is on site. This is a cost effective decision for the complex. SRS can safely store the materials. The receipt program is about 5% ahead of schedule and Plutonium receipts are expected to be completed by 2010. About 1% of the Plutonium has already been processed through H-Canyon and sent to DWPF. SRS is planning to complete disposition by 2019.

SRS is continuing to receive excess Uranium from across the DOE complex. SRS will be receiving about 7.5 metric tons from NNSA and DOE sites. Material is processed through H-Canyon then sent off-site to be processed into commercial fuel. This process has been successful since 2000. Currently, SRS is 10% ahead of schedule for receipt of materials, and all materials will be received by end of 2009. SRS has dispositioned 15% of the material received. Dispositioning of the Uranium should be complete by 2010.

Savannah River National Laboratory (SRNL)

SRNL has a new project in collaboration with the Federal Bureau of Investigation (FBI.) SRNL and the FBI currently have an existing facility providing capability to examine evidence that may contain radioactively contaminated materials. The facility is called the Radiological Evidence and Analytical Laboratory and is currently operational. The FBI wants to expand this capability, so SRNL is now working on the Radiological Evidence and Examination Facility. This is a \$20 million project. Currently, a Memorandum of Understanding is in development between DOE-SR and the FBI. This is an FBI funded project. The new facility is expected to be operational in 2010.

K Area Complex

Safeguards and Security upgrades have been completed in the K-Area complex to achieve compliance with new DOE requirements. System testing is currently underway with the new upgrades. Design basis threat upgrade compliance is expected in Sept 2008, making SRS the first site to be compliant.

Proposed use of SRS lands for U.S. Military

Currently, SRS is preparing an environmental assessment to analyze the potential environmental consequences of proposed use of SRS land for military training. This was briefed to the CAB in January 2007. Agreement is being prepared between the US Army and DOE that should be ready in June 2008. A draft environmental assessment is expected for public review in September 2008.

Second Annual Environmental Justice (EJ) Conference

- The 2008 State of Environmental Justice in America Conference will be held on May 21-24, 2008 in Washington, DC. The purpose of the conference is to conduct an assessment of prior challenges, failures and successes, and chart a roadmap for future EJ accomplishments through a national discussion.
- DOE is committed to incorporating EJ principles into its policies, regulations, guidelines, and practices.
- Invited participants for the conference will include the Secretary of Energy, U.S. presidential candidates, congressional leaders, Federal and state agencies, DOE contractors, interested stakeholders.
- The Site Manager, Jeffrey Allison, will serve on a government panel to present Savannah River Site's accomplishments, current missions, and EJ activities.

Environmental Protection Agency (EPA)

Mr. Jim Barksdale, EPA, updated the CAB on recent agency activities. He noted that the Federal Facility Agreement (FFA) clean-up work is proceeding well at SRS for 2008. He said that the M-Area Proposed Plan is currently out for public comment, and the C-Area Burning Rubble Pit Record of Decision should be signed in June or July. Mr. Barksdale explained that the 2009 work load looks good in terms of funding and the cleanup schedule should continue as planned. However, he brought up concern regarding out year funding, specifically 2010 and beyond. Mr. Barksdale described how SRS has a reasonable schedule and that some big ticket items associated with that work appear to be in jeopardy. He stated that there may be a shortcoming regarding continued protection of public health and the environment particularly with work associated with P, R and D Areas. Mr. Barksdale reminded the Board that failure by DOE to adequately request the funding for agreed FFA milestones will result in EPA and the state of SC being at odds with DOE. He explained that could possibly lead to dispute and enforcement activities taking place. Mr. Barksdale explained that EPA, the state of SC and DOE are in discussion at the facility level for out year plans. He also stated that EPA and DOE are in discussions at the Headquarters level.

South Carolina Department of Health and Environmental Control (SCDHEC)

Ms. Shelley Sherritt, SCDHEC, provided the state agency viewpoint. She noted that on a national level, some sites have not had funding to fulfill their clean-up goals and recognized that SRS has been very fortunate in having sufficient funding to date. She commented that SRS has been successful in maintaining sufficient funding through good management decisions and efficiencies in use of funds provided.

Ms. Sherritt also explained that SCDHEC is looking at the permit modification application to the salt waste permit. She explained that SCDHEC has requested input from the Nuclear Regulatory Commission (NRC), has met with the NRC and expects the NRC to formally state its position in a meeting summary document. Ms. Sherritt explained that SCDHEC may have a draft permit modification decision in the summer. She requested that CAB members provide their thoughts regarding methods of obtaining public input on this topic.

Tom Rolka, SCDHEC Aiken office, stated that Rick Caldwell has been promoted to Assistant Bureau Chief of Environmental Services He said that Jennifer Hughes is the new Regional Director, and she will be at future CAB meetings.

Georgia Department of Natural Resource (GADNR)

Al Frazier, GADNR, explained his role on the CAB, for the benefit of newer members. He stated that GADNR does not have regulatory authority regarding the SRS, but as an adjoining state, GA is affected by decisions made regarding SRS. Mr. Frazier discussed GADNR activities as follows:

- Smog season in GA begins May 1 and many GA counties around Atlanta, Augusta and Macon are not allowed outdoor burning.
- Summer drought in GA affects 54 northern counties that will remain under Level 4 restriction. There are some counties that have met restriction requirements and moved to Level 2 status. The southern part of GA has received ample rainfall and most counties are in Level 1 status.
- A radionuclide identification system (RIDS) has been installed at a way station in Columbia County headed west bound on I-20. Funding for the facility was provided by state of GA, and GADNR oversaw the construction. The facility is operated along with the GA Department of Public Safety. The system operates by triggering alarms if a vehicle is suspected of containing inappropriate materials. In such cases, GADNR will respond to determine if a vehicle can continue.
- In GA, the Radioactive Materials Program has been conducting public meetings to facilitate revisions to radioactive materials rules implemented by the NRC. The new rules are should be requested for adoption in June 2008.

Public Comments

Gary Zimmerman noted use of the phrase "highest percentage by volume" when discussing cleanup activities. He explained this indicates that the CAB is better aware that cleanup progress is not purely measured by volume, and that radioactivity is another measurement of progress. He explained that CAB members should be aware that progress can be measured both by volume and by curies treated, and he encouraged the CAB to be mindful of this difference when discussing cleanup activities.

Glenn Carroll, Coordinator of Nuclear Watch South, expressed interest in the CAB's thinking about the Waste Solidification Building and discussed high alpha waste associated with the tanks. Ms. Carroll discussed problematic waste at MOX. She emphasized her opposition to the MOX project and offered plutonium immobilization as a project that would be effective and save money. Ms. Carroll wanted the CAB to think about red oil, part of the high alpha waste, and believes it can cause the MOX factory to explode.

Tom Clements, with Friends of the Earth, explained that he is also on the Board for Nuclear Watch South. He thanked Mr. Allison and Mr. McGuire for their presence at the meeting and for being open to discussion. Regarding SCDHEC and the Saltstone issue, Mr. Clements would like a hearing or workshop on the topics discussed earlier. Regarding, use of the SRS by the military, Mr. Clements questioned how long the Army would be using SRS land and the reasoning for giving the Army this option during a time when the Site is being considered for other uses. Mr. Clements expressed concern over frequent changes to MOX program plans. Mr. Clements expressed belief that the most expensive cost option has been chosen regarding MOX. Mr. Clements stated that DOE has made a decision in advance of the environmental impact statement to terminate the Plutonium Vitrification facility.

~End of Public Comments ~

Chair Update

Ms. Donna Antonucci, CAB Chair, thanked everyone for participating in the Board meeting and recognized the value of open dialogue with the agencies present. She recapped recent committee meetings and discussed emeetings used at recent committee meetings. Ms. Antonucci explained that this chat room type approach allows the CAB to look toward the future and better communicate with more members of the public. She also highlighted the Board's new logo in use, and praised contributors for the recent Board Beat publication. In addition, she emphasized the success of the third P-Reactor workshop and recognized participants involved.

Ms. Antonucci briefed CAB members on the April SSAB Chairs meeting held in Hanford, WA. She explained that Ranowul Jzar attended with her, and she described the tours and meetings held. She explained that each CAB represented at the complex-wide meeting shared its top three concerns. Ms. Antonucci explained the concerns that she and Ms. Jzar presented at the meeting: critical path for liquid waste, Plutonium Consolidation, and the P-Reactor Workshops. In conclusion, she asked CAB members to provide any ideas for future information desired from the bi-annual meetings.

Facilitator Update

Jenny Freeman, CAB Facilitator, discussed the status of SRS CAB recommendations as follows: 1 recommendation pending, 22 recommendations open, 231 recommendations closed. No recommendations were awaiting responses. The full recommendation report may be viewed at the CAB website.

Waste Management Committee, Joe Ortaldo – Chair

Art Domby – Vice Chair (Liquid Waste) Alex Williams – Vice Chair (Solid Waste)

Joe Ortaldo, Waste Management Committee Chair, reviewed recent committee topics. He discussed the interim salt processing ARP/MCU that was recently started and explained the significance of this event. Mr. Ortaldo noted that this is the first salt processing of any size and consequence established in the United States. He further explained that the processing will reduce the salt inventory between now and 2013 when SWPF starts. Further, it will provide real information with real waste to confirm that the SWPF will work, allowing time for facility modifications needed based on the lessons learned along the way. On June 24, DOE has agreed to attend and give more details relative to the path ahead with salt processing.

Mr. Ortaldo also highlighted the April 15, 2008 committee meeting with a panel discussion that included SCDHEC, DOE-HQ, NRC, EPA and DOE-SR. The panel addressed issues relative to the Section 3116 status; Saltstone operations and the progress made on waste determination for closure of the tanks. Details of the meeting are available on the CAB website. He stated that the panel has agreed to return in fall 2008 for a similar public workshop to address details of the performance assessment, including the computer modeling that DHEC, NRC and DOE have been developing. He described this as 'a key area to be addressed in order to move forward with tank closures'.

Recommendation # 255, Potential Waste Solidification Building (WSB) Cost Savings was discussed. A motion to approve the recommendation was made by Joe Ortaldo and was seconded by Alan Eckmyre. The motion was unanimously approved by the 18 CAB members present. Specifically, the recommendation states:

The SRS CAB recommends that by July 29, 2008, DOE:

- 1. Identify existing/planned EM waste treatment capabilities suitable for use or modification to satisfy the Waste Solidification Building (WSB) capabilities and report these findings to the SRS CAB.
- 2. Prepare a cost benefit analysis documenting overlapping capabilities, cost saving potentials (if any), and reassurance for the need to construct and operate the WSB.

The entire recommendation is available on the SRS CAB website.

Facilities Disposition & Site Remediation Committee, Mary Drye - Chair

K. Jayaraman – Vice Chair

Ms. Mary Drye, Facilities Disposition & Site Remediation Committee Chair, updated the Board on committee activities. She introduced Wade Whitaker, Area Completion Project (ACP) Federal Project Director.

<u>Presentation – A Area Completion Project Update</u> – Wade Whitaker, DOE-SR

Mr. Wade Whitaker provided an update of the soil and groundwater clean-up and facility deactivation and decommissioning at SRS. He addressed the project performance, project status, remedial technology utilization, and project milestones. He explained the incremental progress that has been completed at SRS and the long-term scope, highlighting that SRS has met all 2,025 FFA milestones since 1993. Mr. Whitaker discussed technology used for clean-up including:

- Edible Oils for Microbes
- Chemical, Metals & Pesticides Pits (CMP)
- Electrical Resistance Heating (ERH)
- MWMF Phytoremediation Upgrades
- Silver Injection
- Hydraulic Fracturing to help DNAPL Treatment

The entire presentation is available as an attachment to this document, and also on the SRS CAB website.

Ms. Drye recognized Mr. Ray Hannah, DOE-SR, for the successful P-Reactor Workshop that took place the previous night.

Public Comments

Mr. Gary Zimmerman commented that CAB Members should be skeptical when hearing statistics in presentations. He stated that terms such as "70% complete" may not mean that 70% of the work is done, but may refer to the number of waste units addressed without regard to the size of waste units. Regarding the P-Reactor Workshop held the previous night, Mr. Zimmerman commented that statements included that the reactor vessel contains 200,000 curies and the water has 15,000 curies. He stated that curies in the water could get to groundwater and are more dangerous than those in the reactor vessel, noting that the danger of curies depends on what form the curies are in. Mr. Zimmerman asked CAB Members to consider these questions:

- Has anyone established how many curies there are in total at SRS with an understanding of how these will degrade over time?
- With 13 tons of plutonium and 7.5 tons of uranium coming in, how will the total number of curies at SRS change?
- Will the MOX plant and H-Canyon activities increase the number of curies at SRS?
- At SRS, how many curies are "safe" like those in the reactor vessel, and how many are more dangerous like the ones in the water at P-Reactor?

Ms. Glenn Carroll commented that the function of the CAB is unclear to her, and she expressed concern that most information at CAB meetings comes from DOE and not the public. She stated that during the public comment period for DOE complex transformation, 104,000 comments were submitted from the public requesting that the mission of the DOE complex be for waste management and materials disposition. She emphasized that the tritium extraction facility will exacerbate the tritium problems at SRS. She asked the CAB to be the conscience of DOE. Ms. Carroll said that red oil is in the nitric acid used to dissolve impurities in plutonium in the MOX process. Ms. Carroll stated that at certain temperatures and pressures the nitric acid chemistry changes and can be highly explosive. She said that the exact temperatures and pressures are not well-understood.

Mr. Tom Clements asked DOE for help in finding the record of decision that allows material to go into H-Canyon. He told CAB Members that DOE is looking at reprocessing spent nuclear fuel to remove plutonium and stated this would contribute a large amount of nuclear waste. He said that SRS could be the targeted site for reprocessing and expressed concern over the funding available within EM in this regard. Mr. Clements encouraged participation by DOE at a discussion regarding reprocessing to be held in Columbia on May 30. He offered flyers to describe the meeting.

~ End of Public Comments ~

Strategic & Legacy Management Committee, Madeleine Marshall - Chair

Ms. Madeleine Marshall, Chair for the Strategic and Legacy Management (S&LM) Committee informed the CAB of recent legacy management activities at the site regarding re-forestation at SRS. She explained that a wild land fire occurred due to a storm at SRS on March 8, 2008 and the fire was contained. Also the forestry service has completed planting of trees on 1134 acres at SRS, and the planting program is on schedule for the year.

Ms. Marshall also cited an encouraging story about the Savannah River Ecology Lab (SREL) and discussed renewed hope regarding the long-term outlook for the lab. She explained that about \$1.5 million from DOE is assisting the lab with work specifically related to SRS missions. She noted that SREL is optimistic in working with the new site contractor, Savannah River Nuclear Solutions (SRNS), due to the company's enthusiasm over outreach programs. Ms. Judy Greene commented that the lab will continue to aggressively pursue funding from outside resources.

Ms. Marshall commented that the S&LM Committee met jointly with NM and FD&SR committees on April 29. Topics of concern by S&LM are covered by the next two presentations.

<u>Presentation – M&O Transition Savannah River Site</u> – Doug Hintze, DOE-SR

Mr. Doug Hintze, Acting Assistant Manager for Integration and Planning, provided a status of the SRS Management and Operating (M&O) contract transition. He explained that Savannah River Nuclear Solutions (SRNS) was selected as the M&O contractor on January 10, 2008. The limited liability corporation is comprised of Fluor Federal Services, Inc., Honeywell International, Inc., Newport News Shipbuilding and Drydock Company (a Northrop

Grumman Company) and subcontractors Lockheed Martin Services, Inc and Nuclear Fuel Services, Inc. He explained that the contract is valued at about \$800 million per year with a five-year base period and optional extension for up to five additional years. The transition period began May 2, 2008 and SRNS will assume operations of SRS on August 1, 2008. Mr. Hintze explained the work scope, transition objectives, transition schedule and critical steps for transition. He explained that the transition is successfully on schedule with a focus on safety and security.

The entire presentation is available the SRS CAB website.

CAB Members inquired about staffing levels, subcontracts, and funding during the presentation.

<u>Presentation – SR Environmental Management Certified Baseline</u> – Doug Hintze, DOE-SR

Prior to the presentation, Mr. Jeffrey Allison, Manager DOE-SR, encouraged Ms. Marshall to meet the new SREL Director and invite him to brief the Strategic & Legacy Management Committee on his ideas for the future of SREL. He then addressed the CAB with introductory remarks regarding the Certified Baseline. He explained that certification of the baseline was an important step for the Savannah River Environmental Management program. Mr. Allison stated that the process was completed for all sites in the EM complex and was a commitment that Mr. Rispoli made to Congress. He noted the importance of the fact that certification was completed by a group independent of the Environmental Management program. Mr. Allison discussed how tough challenges are inherent to the issues associated with environmental cleanup of materials at SRS, and that this baseline provides a credible point of departure to evaluate alternatives that will improve performance. He stated that this baseline confirms the strong rate of return on investments made in SRS.

Mr. Doug Hintze, Acting Assistant Manager for Integration and Planning, explained the Certified Baseline. He described the Baseline as an accepted planning tool that validates the processes used by Savannah River (SR) Environmental Management (EM) to establish estimates and schedules for work. The SR EM Baseline helps establish credibility with Congress regarding projects and funding uses at SRS. The SR EM Baseline identifies the work to complete clean-up, sequenced through time, with a detailed cost estimate and defined assumptions that account for uncertainties. Mr. Hintze explained how balancing is required between the environmental cleanup priorities. He also discussed ways in which SRS has been successful in realigning funds to maximize progress in fiscal year 2008. He provided a detailed chart showing the Project Execution Plan (PEP) EM Life Cycle Baseline. Mr. Hintze explained how SRS can show a strong rate of return on investment by taxpayers.

Mr. Hintze's entire presentation is available on the SRS CAB website.

Ms. Marshall concluded her committee report with comments regarding recommendations that are open. Ms. Marshall reminded DOE that the CAB is looking for funding status of SRS Projects by PBS in terms of budget development and what projects won't get done because money is not available.

<u>Nuclear Materials</u>, Manuel Bettencourt – Chair Stan Howard – Vice Chair Judith Greene McLeod – Vice Chair

Mr. Manuel Bettencourt, Nuclear Materials (NM) Chair, updated the CAB on recent activities of the NM Committee. He noted that topics addressed by the committee have been covered throughout the meeting. Mr. Bettencourt noted such topics as the plutonium vitrification facility, depleted uranium oxide and activities in K-Area as discussed by Patrick McGuire. Mr. Bettencourt stated that the next NM committee meeting will address topics related to K-Area.

<u>Administrative Committee</u>, Sarah Watson - Chair

Ms. Sarah Watson, Administrative Committee Chair, updated the Board on recent committee activities. She noted the following:

• The CAB Website has been updated. Eventually there will be a complete overall of the website. Current updates include pictures of current members, minutes, and pictures from recent meetings.

- CAB information manual updates were provided in meeting handouts. These are annual updates as described in the CAB's internal processes document.
- The new issue of the Board Beat has been published. CAB Members were asked to continue to contribute material for future issues.
- New mentors and mentees were introduced. This program has been implemented to assist new members as needed. Members were encouraged to provide feedback on the mentor/mentee process.
- Members were encouraged to consider new potential applicants for the Board. A new membership campaign will begin late summer.

Public Comments

Ms. Glenn Carroll addressed the Board. She expressed appreciation for responsiveness of the CAB to public speaking times. She requested that a table be available for public materials that are not CAB related at future meetings. Ms. Carroll also expressed appreciation for the P-Reactor decommissioning public workshop that occurred at the request of the CAB on May 19.

Mr. Gary Zimmerman discussed a town hall meeting that was held by the new M&O contractor, Savannah River Nuclear Solutions (SRNS). He commented that the SRNS mission seems to conflict with that explained in the certified baseline discussion. He explained that the head of SRNS talked of growth at the SRS while the day's presentation on the Certified Baseline shows decline at SRS for the outyears.

~ End of Public Comments ~

Mr. Jeffrey Allison, Manager DOE-SR, clarified that some missions at SRS will decrease in out years as environmental cleanup of legacy materials are addressed. This work was discussed in the Certified Baseline presentation. He explained that SRS is also working toward new missions, such as the new work at SRNL discussed earlier in the meeting, and he anticipates growth at the site for new missions. He explained that there is not a conflict between Mr. Munn's (SRNS) statements during recent town hall meetings and the certified baseline discussion held at this meeting.

Mr. Art Domby announced that former CAB Chair, Karen Patterson, was recently confirmed to serve on the South Carolina Governor's Radioactive Materials Advisory Committee. He stated that the position is confirmed by the SC Senate and includes about seven members.

Meeting Adjourned 3:50 p.m.

Handouts

Handouts listed herein are available by contacting the SRS Citizens Advisory Board at 1-800-249-8155.

Agenda
SRS CAB Recommendation Status Report
Potential Waste Solidification Building Cost Savings (Recommendation #255)
Area Completion Project Update
M&O Transition – Savannah River Site
SR Environmental Management Certified Baseline