The Savannah River Site (SRS) Citizens Advisory Board (CAB) Nuclear Materials Committee met on Wednesday, January 11, 2006, 5:00 PM, at the Aiken Municipal Conference Center. The purpose of this meeting was to discuss the F-Area Materials Storage Facility De-Inventory; the revised CSSC Project, and to hear public comment. Attendance was as follows:

**CAB Members**
- Joe Ortaldo
- Perry Holcomb
- Karen Patterson
- Bill Willoughby
- Manuel Bettencourt
- Jean Sulc
- Gerald Devitt
- Wendell Lyons
- Jimmy Mackey

**Stakeholders**
* Rick McLeod
  Bill McDonnel
  Russ Messick
  Lee Poe
  Madellene Marshall
  Liz Goodson
  Donald Morris
  Chris Timmers
  Bill Weiss

**DOE/Contractors**
de’Lisa Bratcher, DOE
Virginia Kay, DOE
David Burke, WSRC
Nick Delaplane, DOE
Paul Sauerborn, WSRC
Lyddie Broussard, WSRC
Patrick McGuire, DOE
Julie Petersen, DOE
Scott DeClue, DOE
Jim Moore, WSRC
Alan Gunter, DOE
Tommy Williamson, BSRI
Larry Davis, BWXT
Rick Sprague, WSRC

**Regulators**
Bob Adams, SCDHEC
Welcome and Introduction:

Gerry Devitt, Chair, welcomed those in attendance and asked them to introduce themselves.

F-Area Material Storage (FAMS) Facility De-Inventory: Rick Sprague stated the purpose of this presentation is to provide a status of the de-inventory operations in the F Area Material Storage Facility while it maintains an adequate plutonium surveillance capability. FAMS has a history as follows:

- 1950s
  - FAMS facility constructed
    - Approx. 200 ft. long, 100 ft. wide, and 28 ft. in height
    - Blast resistant structure to withstand equivalent of a 550 mile per hour wind
- 1960s
  - Actinide Billet Line
    - Aluminum-clad billets containing a pressed mixture of Neptunium Oxide and aluminum powder were fabricated in this line
    - Billets transferred to 300 Area where they were formed into reactor targets
- 1970s
  - Vault added to serve Actinide Billet Line
  - Actinide Billet Line discontinued operation
- 1980s
  - Constructed Plutonium Experimental Facility and Plutonium Fuel Form Facility
    - Plutonium Experimental Facility
• Heat source development operations

• Feed material converted into ceramic pellets in a series of mechanical processes
  ▪ Plutonium Fuel Form Facility

• Heat source manufacturing operations

• Located in same cells as the Plutonium Experimental Facility

  o New Metallography Laboratory
    ▪ Designed for pellet examination (oxide Line) and clad examination (metal line)
    ▪ Constructed in support of Plutonium Fuel Form Facility but was never used to analyze materials

• 1990s
  o Vault added for additional storage

• Current Operations
  o Limited Extent Surveillance Operations
    ▪ Interim surveillance of plutonium stored in 3013 containers and 9975 packages
    ▪ FY05 was first year of operations
    ▪ Work accomplished ahead of schedule
    ▪ Team reduced average surveillance time by more than 40% through continuous improvement actions
  o Repackaging, measurements, and lag storage of various special nuclear materials until ready for shipment for disposition or interim storage
  o Ongoing material shipments to HB-Line and KAC
Mr. Sprague stated that the De-Inventory drivers for moving from FAMS to KAC was to avoid implementing the new security Design Basis Threat guidance by 9/30/06 at FAMS, by consolidating the inventory at KAC, which in turn eliminated the need for safety system upgrades FAMS and eliminate shipments of material between K and F Areas.

Mr. Sprague explained the new K Area Projects as follows:

- **K Area Interim Surveillance and Storage**
  - Supports de-inventory of FAMS by moving the functions of the Limited Extent Surveillance Program to KAC
  - Provides for the destructive examination of 3013’s to be performed
  - Provides for temporary storage of the material awaiting disposition
  - Scheduled completion date of 11/30/06

- **Design Basis Threat**
  - Provides the necessary modifications to allow KAC to store Category 1 quantities of nuclear materials in accordance with security requirements
  - Mandated implementation date of 9/30/06

- **3013 Container Surveillance and Storage Capability**

In conclusion, the key summary points are:

- Maintaining two facilities to meet Design Basis Threat guidance is not cost effective
- De-inventory is going well an all materials have a disposition path out of FAMS
- Plutonium capabilities will be maintained in KAC
- FAMS will be prepared for transition to D&D

The following questions and requests were asked of Mr. Sprague:
Q. What constitutes a category I facility?

A. A category I facility is defined by the security level required due to the inventory being stored, its value, etc.

Q. What is lag storage?

A. Temporary storage for processing further or until needed.

Mr. Mackey asked that as building names are changed, that the CAB be notified. Mr. Sprague stated that due to security, that it may be difficult to provide that information.

Q. Lee Poe asked if there was a list of Cat I radionuclides for this project.

A. Allen Gunter stated that he would provide what he could relative to the request.

Q. What is the status of removing Pu238 from the FAMS facility?

A. The material will be removed as a part of the D&D process.

**Revised CSSC Project:** Tommy Williamson stated the purpose of this presentation is to provide a status of the revised Container Surveillance and Storage Capability Project (CSSC), K-Area Complex.

Mr. Williamson provided the components to the 3013 CSSC Mission as follows:

- **Container Surveillance:**
  - Provide the capability to perform non-intrusive inspections of the 3013 storage containers and their content to detect conditions adverse to safe long term storage; and provide the capability to sample the 3013 contents and to destructively analyze the container to detect conditions adverse to safe long-term storage

- **Plutonium Stabilization and Packaging:**
  - Provide capability to open and remove the contents of 3013 containers; and to stabilize the Plutonium material via a furnace and to repackage the Plutonium in a new 3013 container per DOE-STD-3013

- **Expanded Storage Capability:**
  - Provide safe, secure, storage of 3013 containers bearing Plutonium material
The project status is as follows:

- October 2003 – Mission need (CD-0) approved
- April 2005 – DOE cancels F-Area project; authorizes conceptual design for K-Area project
- October 2005 – Completed Conceptual Design; submitted CD-1 package
- January 2006 – Anticipate Construction to begin with 18.6 million dollars approved by Congress in FY06 to complete preliminary design and initiate final design

The Project Funding and Schedule is as follows:

- Estimate Range is 79 to 97.2 million dollars
- FY06 funding for Engineering and Design is 18.6 million dollars
- Anticipate construction funding of 3 million in FY06 to initiate Dismantlement and Removal activities
- Funding will be requested for FY07-FY10
- Forecast schedule milestones ranges are design complete 7/07 – 10/07; construction complete 12/08 – 5/09; operationally ready 11/09 – 10/10.

The following questions/statements were asked of Mr. Williamson:

Lee Poe would like to see the risk evaluations for KISS.  Mr. Mackey would like to know the cost and schedule for the CSSC project.

**Public Comment:** There were no public comments.

**Adjourn:** Karen Patterson adjourned the meeting at 7:25PM.