The FD&SR Committee held a meeting on Tuesday, August 11, 2015, from 6:30-8:20 p.m., at the New Ellenton Community Center in New Ellenton, South Carolina. It was also streamed online via Google Hangouts and posted to the CAB’s website and YouTube page. The purpose of this meeting was to receive a presentation about expressing concentrations. There was also time set aside for committee discussion and public comments.

Attendees:

**CAB:**
- Tom Barnes – FD&SR Chair
- Bill Rhoten – FD&SR Vice Chair – Online
- Harold Simon – CAB Chair
- Nina Spinelli – CAB Vice Chair
- Louie Chavis – Online
- Dawn Gillas
- Eleanor Hopson
- Ed Sturcken
- Louis Walters

**DOE/Contractors/Others:**
- Michael Mikolanis, DOE-SR
- Avery Hammett, DOE-SR
- de’Lisa Carrico, DOE-SR
- Amy Meyer, SRNS
- Kim Cauthen, SRNS
- James Tanner, Time Solutions
- Tina Watson, Time Solutions

**Agency Liaisons:**
- Shane Shull, SCDHEC
- Kevin Baird, SCDHEC
- Scott Simons, SCDHEC
- Diedre Lloyd, EPA

**Stakeholders:**
- Liz Goodson
- Nancy Bobbitt

Welcome and Introduction:

CAB member Tom Barnes welcomed everyone, and stated the meeting was being streamed online. He asked everyone to introduce themselves. He discussed the committee’s focus, and provided a brief recommendation status update, stating recommendation 331 was pending. CAB member Barnes introduced Ms. Avery Hammett, DOE -SR, who serves as the FD&SR Committee DOE Point of Contact to provide a brief update of ongoing DOE activities relating to the FD&SR Committee. CAB member Barnes thanked Ms. Hammett and allowed her to begin the scheduled presentation.

**Presentation: Expressing Concentrations – Avery Hammett, DOE-SR**

Ms. Hammett said the purpose of the presentation was to fulfill a FD&SR 2015 Work Plan topic by presenting information about the most common units of concentration used in CAB presentations. She defined the word “concentration” before she discussed individual units of concentrations. She showed a picture of a sign that read “contains ethanol maximum 10%” and explained how “10 percent” meant 10 parts ethanol per 100 parts of fuel. Ms. Hammett stated concentrations of SRS contaminants were much less than 10 percent and even much less than one percent. She repeated that concentrations at SRS were so small that generally contaminants were not discussed in terms of percent; however, she showed a slide of math figures to show the perspective of how small the contaminants at SRS were. She provided various examples of how the contaminant measurements levels related to daily life. For example, she said “one part per million” (1 ppm) was equivalent to one grain of salt dissolved within 12 ounces of water. She explained the units of measurement most commonly used in documents at SRS before providing examples of how contaminant measurements related to daily life for “one part per billion” (1 ppb). She recapped all the measurements she previously covered in her presentation, which she commented were measurements used for non-radioactive materials. She then explained measuring radioactive material concentrations was different. She showed a picture of a Geiger counter and explained each click of the Geiger represented the disintegration of one atom and she said disintegrations per minutes represented how much radioactive material was present. She explained the disintegration rates were expressed in curies, which was the measurement used for High Level Waste. Ms. Hammett said environmental samples had much less radioactivity so picocurie (pCi), a smaller unit of measurement was used to express measurements of soil, water, and tissue. She discussed natural radioactivity, which naturally existed everywhere. She stated uncontaminated soil contained approximately 25 picocurie per gram, while uncontaminated groundwater usually contained approximately 10 to 50 picocuries per liter. She encouraged everyone to attend the next two committee meetings since this presentation would have two following parts. This presentation can be found on the CAB’s website at: cab.srs.gov

Committee Discussion:

CAB member Barnes allowed CAB Vice Chair Nina Spinelli to discuss the draft recommendation titled, “Health Effect Reporting by the Savannah River Site” which was tabled at the July Full Board meeting. She discussed various changes made to the draft recommendation. CAB member Louis Walters addressed the first paragraph of the draft recommendation stating he was uncomfortable using the word “release.” CAB Chair Harold Simon suggested changing the sentence to say “caused radioactive and other hazardous materials to be released.” CAB member David Hoel suggested changing the word “conclusions” to “topics” in the background section. The FD&SR Committee agreed on the changes made to the draft.
recommendation and CAB member Barnes said the recommendation should be voted on at the September Full Board meeting. You can listen to this complete discussion on the CAB website at: cab.srs.gov

Public Comments:

There were no public comments.

CAB member Barnes adjourned the FD&SR Committee meeting.

The next FD&SR Committee Meeting will be held on Tuesday, October 13, 2015, from 6:30-8:20 p.m., at the New Ellenton Community Center in New Ellenton, SC.

The online recording of this meeting is located on the CAB’s website at:

cab.srs.gov