The Risk Management Working Group of the Citizens Advisory Board (CAB) Risk Management and Future Use (RM&FU) Subcommittee met on June 22, 1998, at 6:00 p.m. at the Holley House in Aiken, S.C. The purpose of the meeting was to give the Risk Management Working Group an introduction to risk, obtain information about the Center for Risk Excellence and review the working group strawman. CAB members in attendance were Karen Patterson, Barbara Murphy, Jimmy Mackey and Brendelyn Jenkins. Members of the public in attendance were Mike French, Richard Garniewicz, Virginia Cordova, Srini Venkatesh, Ed Hallinan, Martha Ebra, Greg Peterson, Lee Poe, Steve Gaithn, Gerald Devitt, R. Foster Bradley, Joseph Sciarro, Ron Malanowski, William McDonell and Doug Shull. Todd Crawford attended as the technical representative to the CAB. Mike Schoener attended as the CAB facilitator. Gary Little from the Department of Energy Savannah River Operations Office (DOE-SR) attended as the Associated Deputy Designated Federal Official. Jennifer Hughes attended as a representative of the South Carolina Department of Health and Environmental Control. Members of the Consortium for Risk Evaluation with Stakeholder Participation (CRESP) were Lynne Fahey McGrath and Dr. Bernard Goldstein. Dr. Al Young and Dr. Margaret MacDonell attended as members of the Center for Risk Excellence. Members of DOE-SR in attendance were Virginia Kay and Jerry Nelsen. Bill Rajczak attended as a member of Bechtel Savannah River Inc. (BSRI). Members of Westinghouse Savannah River Company (WSRC) were Bob Weatherby, Shelia McFalls, Mary Flora, Bordette Lawrence and Jim Moore.

Karen Patterson, a member of the CAB, welcomed all in attendance and explained that this meeting was an effort to have the working group learn about risk. Ms. Patterson then introduced Mike Schoener of MAS Consultants Inc. as the facilitator of the meeting.

Mike Schoener reviewed the agenda and explained that the meeting would be video taped to give to those members of the working group that couldn't make this meeting. Mr. Schoener then explained that during Dr. Goldstein's presentation, Mary Flora would screen the questions for either a response from Dr. Goldstein or Virginia Kay would place the question on a flip chart to be answered later. Mr. Schoener then introduced Dr. Goldstein.

Copies of the video are available and will be distributed to all the Risk Management Working Group members who were not able to attend. Others who want copies should contact Jim Moore, WSRC, (803) 725-5663.
Dr. Goldstein explained that risk assessment was helpful in itself but was only a factor in risk. He stated that it was just another government statistic such as the unemployment rate. He stated that risk assessment should not be considered as providing any absolute number. Dr. Goldstein stated that it was more important that there was a standard method to determine the risk assessment. Dr. Goldstein stated that the stakeholders should be engaged in each step of the risk management process, the problem/context, risks, options, decisions and actions. Dr. Goldstein defined a risk assessment based on the laws of toxicology. There are three basic laws: The dose makes the poison, chemicals have specific effects and humans are animals. Dr. Goldstein stated that risk equals a hazard plus an exposure. He said rattlesnakes are poisonous but if there were no rattlesnakes, there would be no risk. Dr. Goldstein explained dose verses response. He explained thresholds and the linear hypotheses of cancers and mutations. Dr. Goldstein stated that there is no proof of the linear hypotheses. Dr. Goldstein explained that there is no absolute number in risk assessment because low level risk can't be measured directly. He stated that risk assessment is not a science because the numbers couldn't be validated. Dr. Goldstein stated that there was a need to prioritize risk but it had to be a reasonable approach that makes sense. He stated that risk characterization should be determined by: who, when, where, what and why questions. During discussions, it was pointed out that the assumptions used in risk evaluations are very important and in many cases, the problem.

Mike Schoener introduced Dr. Al Young, the director of the Center for Risk Excellence. Dr. Young stated that there are five cross cutting risk issues. They are: future use and stewardship/residual risk, stakeholders/partners, risk-based decision making, cleanup standards and science and technology. Dr. Young stated that their goal is the application of good science in decision making. He stated that the Center must be aware of what is going on with regulatory agencies, stakeholders and research agencies and there must be progress through partnership. Dr. Young stated that their emphasis areas are communication, policy, management, assessment and education.

Mike Schoener reviewed the working groups individual goal priorities. He reviewed how the teams were developed and the draft members of the teams. They were as follows:

A. Determine how risk is defined and determined per program (Analysis/model/process)

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<th>Members:</th>
<th>Tech Support:</th>
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<td>Lee Poe</td>
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<td>Todd Crawford, CAB</td>
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B. Recommend improvements in risk communications

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<tr>
<td>Wade Waters</td>
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<td>George Minot</td>
<td>Mary Flora, WSRC</td>
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Barbara Murphy  
Jimmy Mackey  
Lynn Waishwell  
Laurie Hunt  

C. Determine how risk is balanced with other factors in making decisions

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D. Review risk information available at off-site and at other sites

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<td>Steve Etheridge, WSRC</td>
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After discussion, the following changes were made:

- Jimmy Mackey was added to Team D
- Lee Poe was added to Team D
- Virginia Cordova was added to Team A
- Ed Hallinan was added to Team A
- Jerry Devitt was added to Team A
- Srini Venkatesh was added to Team C and D
- Nordette Lawrence was added to Team D as Tech Support

In addition, team leads were chosen with the following results:

- Team A - Jennifer Hughes
- Team B - Jimmy Mackey
- Team C - Karen Patterson only agreed to set up the first meeting of the group
- Team D - Jim Moore agreed to obtain a chairman since the members were absent. (Lynn Waishwell has agreed to lead this team)

The Teams are currently as follows:

A. Determine how risk is defined and determined per program (Analysis/model/process)

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<td>Jennifer Hughes: Team Lead</td>
<td>Todd Crawford, CAB</td>
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Lynne Fahey McGrath          Bill Rajczak, BSRI
Sam Booher
Virginia Cordova
Ed Hallinan
Gerald Devitt

B. Recommend improvements in risk communications

**Members:**
Wade Waters
George Minot
Barbara Murphy
Jimmy Mackey: Team Lead
Lynn Waishwell
Laurie Hunt

**Tech Support:**
Virginia Kay, DOE-SR
Mary Flora, WSRC

C. Determine how risk is balanced with other factors in making decisions

**Members:**
Karen Patterson
Mike French
Lee Poe
Srini Venkatesh

**Tech Support:**
Virginia Kay, DOE-SR
Bill Rajczak, BSRI
Mary Flora, WSRC

D. Review risk information available at off-site and at other sites

**Members:**
Donna Martin
Lynn Waishwell: Team Lead
Jimmy Mackey
Lee Poe
Srini Venkatesh

**Tech Support:**
Virginia Kay, DOE-SR
Steve Etheridge, WSRC
Nordette Lawrence

It was decided that the team leads should plan the next team meeting with the objective of the meeting being the following: 1) write up a strawman of their team objectives and 2) write a definition of risk. These meetings should be completed in time to have a full working group meeting within a month. At the next full working group meeting, the teams should review their strawman objectives with the full working group.

Karen Patterson thanked Dr. Goldstein and Dr. Young for their participation and asked anyone if they had any comments. There were no comments.
Karen Patterson adjourned the meeting.

Meeting handouts may be obtained by calling 1-800-249-8155.