



## **SRS Citizens Advisory Board**

### **Risk Management Working Group - Team A**

#### **Meeting Summary**

August 18, 1999  
District Office of DHEC  
Aiken, SC

---

Team A – Risk Analysis – of the Risk Management Working Group met on Wednesday, August 18, 5:00 p.m. at the District Office of Health and Environmental Control (DHEC). The purpose of the meeting was to receive a presentation on the Integrated Priority List risk analysis. Those in attendance were:

#### Stakeholders

Jennifer Hughes, DHEC  
Lee Poe  
Jerry Devitt  
Todd Crawford

#### DOE/Contractors

Jerry Nelsen, DOE  
Clay Jones, WSRC  
Mary Flora, WSRC  
Jim Moore, WSRC

Jennifer Hughes, Team A Lead, welcomed those in attendance and reviewed the agenda. She asked Clay Jones to make his presentation. Mr. Jones stated that he would be talking about the many considerations involved in making decisions at SRS and how these decisions relate to the IPL. Mr. Jones referred to the Citizens Advisory Board (CAB) Recommendation 70, "Risks and Funding", developed in November 1998. He stated that the recommendation from the CAB was for DOE-SR to supply a priority list based strictly on health and safety risks to workers, the public and the environment along with the traditionally prepared IPL under the present budget system. Mr. Jones stated that in answering the recommendation, DOE-SR stated they would "Look forward to ongoing discussions with the Risk Management Working Group to facilitate a clearer understanding of how the Site uses the terms risk and hazard, how risk is analyzed in our various programs, and how risk is factored into decisionmaking, including budget allocations." Mr. Jones stated that he was attending the Team A meeting and making his presentation in keeping with the DOE-SR response to the recommendation.

Mr. Jones stated that Jim Creighton, a well known lecturer on public participation, states there are three factors in decision making: Technical, Regulatory and Socioeconomic/political. Several years ago, most of the decisions were made on a technical basis, although risk and hazard concerns greatly influenced technical decisions. At that time, regulatory and social considerations were not a great factor in decisions made at SRS. Today, both regulatory and social considerations have a great influence on decisions. Site decisions made today try to balance the three factors.

In discussing risk, other factors such as hazard, probability and consequence come into play. The definition of risk is probability times consequence. Hazard and risk are often used interchangeably, but in fact, are very different.

As we look at the different areas at the site, some are considered a high hazard but a low risk. This is because there are engineered and administrative controls in place, while the hazard is high the risk of a release is very low. An example is the Am/Cm solution. This material is a very high hazard, but due to the degree to which it is protected in the Canyon, it proves to be a low risk to the environment, the site, and the general public. In the case of a waste site in the Environmental Restoration arena, contaminants have

already been released to the environment (the probability of release is one). In this case, while the hazard may be low, the risk can be high since it is already in the environment.

Options for reducing risk include containing the material or reducing the source term. The longer the material is stored the greater the potential risk and the greater the surveillance and maintenance costs. The previous model used for the IPL only looked at a one-year time frame. The current practice is to look at the long-term effect.

In the past the risk based activity evaluation criteria was used to evaluate the risk by program. The stakeholders helped develop the criteria used. At the March meeting of the Risk Management and Future Use Subcommittee, Mr. Jones explained how the site was looking at work over a ten-year period rather than for one year only. In that effort, risk management would require the funding of waste/materials storage operations. The balance of the funding would be divided among Environmental Restoration, Waste Management and Nuclear Material Stabilization. Mr. Jones referred to eight key considerations for problem resolution.

Mr. Jones then explained a recent effort that evaluated the SRS budget by similar considerations as those included in the IPL, by reviewing the Peer Team Break Out by Environmental Management Category matrix. This matrix broke out by funding, the Minimum Safety and Essential Services, Compliance Costs, Executive Order 12088, the Defense Nuclear Facilities Safety Board and Non-Proliferation and Mortgage Reduction requirements.

Mr. Jones illustrated that there are two forces in any decision-making activity, the activating force and the restraining force. The result of the decision will be either positive outcome or concession. In the case of the IPL, the activating force is the increasing scope of work. The restraining force is the reduced funding level. The positive outcome is maintaining the scope of work. Either providing the scope at lower cost or securing more funding results in a positive outcome. The concession is deferring or cutting the work.

Decision influences come from both external and internal sources. External influences include Congress/politicians, citizens, regulators and DOE Headquarters. Internal influences include site management and employees. These influences are weighed against the five imperatives: Safety, Cost Effectiveness, Quality, Teamwork, and Disciplined Operations. Mr. Jones concluded noting that the decision-making process is very complex in today's environment.

Mr. Jones requested the Risk Management Working Group and its teams provide suggestions on how the site could improve its new CAB member orientation process to include risk considerations.

Ms. Hughes asked Todd Crawford to discuss his proposal of rearranging the rows on the Risk Matrix from source to pathway to receptor. Mr. Crawford explained the rearrangement. Mr. Crawford also stated he felt that the IPL should not be on the matrix and requested a discussion at the next meeting. Ms. Hughes asked everyone to review the Risk Matrix and Mr. Crawford's proposal and be ready for discussion at the next meeting. The next meeting is scheduled for October 6. The October 27 meeting may be rescheduled to October 25. This date change will be discussed at the next meeting.

Ms. Hughes adjourned the meeting.

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