



SRS Citizens Advisory Board

Risk Management and Future Use Subcommittee

Meeting Record

January 12, 1998

North Augusta Community Center, N. Augusta, SC

The Risk Management and Future Use (RM&FU) Subcommittee of the Savannah River Site (SRS) Citizens Advisory Board (CAB) met on January 12, 1998, at 7:15 p.m. at the North Augusta Community Center, North Augusta, South Carolina. The SRS CAB members attending were Karen Patterson and Brendolyn Jenkins, as well as the CAB Facilitator, Walt Joseph. Members of the public attending were Bill Rajczak, Stephen King, Mike French, Cynthia Gerrard, John Gladden, Dale Bignell and Peter Gray. Gary Little from the Department of Energy Savannah River Operations Office (DOE-SR) attended as the Associated Deputy Designated Federal Official. Eric Schweitzer from the U.S. DOE, Office of Accelerator Production in Washington, D.C., attended. Jennifer Hughes attended from the South Carolina Department of Health and Environmental Control. Don Morris attended from Burns and Roe Enterprises, Inc. The Westinghouse Savannah River Company (WSRC) attendees were Jack Roberts, Barry Shedrow, Mary Flora, Jack Mayer, Vernon Osteen, Richard Garniewicz, and Jim Moore.

Karen Patterson chaired the meeting in the absence of P. K. Smith who left the joint meeting in order to get to work. Karen introduced Clay Ramsey, DOE-SR, who spoke on the Accelerator Production of Tritium (APT).

Clay Ramsey, DOE-SR, explained that DOE had a dual track strategy, the Commercial Light Water Reactor (CLWR) and the Accelerator Production of Tritium (APT). Clay gave the physical dimensions of the APT facility and explained that the facility would ultimately produce tritium which would be sent to other facilities. He explained that the Record of Decision (ROD) in the programmatic Environmental Impact Statement (EIS) for tritium supply and recycle states that the APT will be built at SRS if the APT is selected to produce tritium. A question was asked if there was duplication of effort since the Tritium folks were also looking at the addition of tritium extraction? It was explained that there was no duplication of effort; the APT EIS will consider the consolidation of facilities and will utilize environmental impact information already developed for the Tritium Extraction Facility draft EIS. When asked, it was explained that they were looking at the use of the targets from the facility for other isotope uses as well, such as in the medical area. Barry Shedrow, WSRC, showed several maps that defined the process of the site selection. They explained the site

selection criteria and weighting strategy used to determine the preferred sites.

Questions were raised regarding the weighting factors utilized in the site selection process. Clay related that the site performed an analysis of the sensitivity of the selection of the facility location to the various weighting factors. This analysis determined that even if different weighting factors were utilized, Site #2 was generally determined to be the preferred site. A question was raised related to what was the worse thing that could happen with the APT. It was explained that one accident scenario, although extremely unlikely, was over heating of the tungsten target. Even in this situation there would not be a resulting reactor type nuclear melt down. The APT nuclear reactions will immediately cease when the electrical power is shut off. Also the residual heat in the APT is far below that in a reactor. A more realistic accident scenario, although still very unlikely, would be a break of a pipe containing tritium. Any such tritium release would not result in a significant impact on the health of the public. It was explained that there was no significant impact on the environment whether a large machine or a smaller modular machine is built. They also selected a site that would allow for expansion from a smaller to a larger machine if required in the future. When asked about the production of either machine, it was stated that the production of tritium goes up with the larger machine. Based on the disqualifying conditions, 8 sites were initially selected. Site #2 became the preferred site with site #6, the secondary site. Jack Roberts, WSRC, explained that any tritium emissions would be well below regulatory standards. Both in the air and in the water, releases would be two to three orders of magnitude below regulatory standard. When asked what was being done to minimize risk, it was explained that there were two heat exchangers in the APT design versus one in a reactor and that a leak would go inward due to an inward pressure differential. When asked why K Reactor Cooling Towers were not recommended, they stated that the operating cost made that option more expensive.

Karen Patterson then introduced Jack Mayer, WSRC, who discussed Wetlands Mitigation Bank Environmental Assessment.

Jack Mayer explained that a wetland mitigation bank provides for advanced compensation for unavoidable wetlands losses due to development. He explained that it was a bank, that places credits into the bank and then takes them out as necessary. He stated that there were four types of mitigation; enhancement, restoration, creation and preservation. The creation of a wetlands is looked at very critically because creating new wetlands is very difficult. He stated that SRS is looking at restoring two bays. Before any credits could be taken out of the bank, a separate National Environmental Policy Act (NEPA) review would be necessary. When asked what would be the driving force of spending dollars on a bank if we didn't know at this time what the credits would be used for, Jack explained that the restoration work was going on anyway and this would be a way taking advantage of it. When asked if these banks were dedicated to DOE or SRS, he stated that it would be for SRS. When asked if the bank could be used to compensate for CERCLA damages, Jack said that hadn't been considered but it could be a possibility. Jack explained that we could not get credit for restoration work done in the past. When asked why this required an Environmental Assessment (EA), Jack said that when the final revised regulations were approved in 1996, someone placed the requirement in the

regulation. Jack said they expected a NEPA decision in March 1998.

Karen Patterson asked if there were any comments from the public. Since most individuals spoke up during the meeting, there were no comments and Karen adjourned the meeting.

Joint Subcommittee Meeting for Risk Management and Future Use and Environmental Restoration and Waste Management

Meeting Record

January 12, 1998

North Augusta Community Center, N. Augusta, SC

The Risk Management and Future Use (RM&FU) and the Environmental Restoration and Waste Management (ER&WM) Subcommittees held a joint meeting on January 12, 1998, at 5:30 p.m. at the North Augusta Community Center, North Augusta, South Carolina. The SRS CAB members attending were P.K. Smith, Karen Patterson, Brendolyn Jenkins, Kathryn May, Bill Lawless as well as the CAB Facilitator, Walt Joseph and the CAB consultant Todd Crawford. Members of the public attending were Gerald Devitt, Elmer Wilhite, Peter Gray, Rolf Arands, Lynne McGrath, Murray Riley, Bill Boettinger, William Pitka, Len Colland, James Pope, John Gladden, Cynthia Gerrand, Donald Morris, John Mayer, Lee Poe, Mike French, Karen Lowrie, Ron Malanowski, Ron Socha, Keith Dykes, Ethan Brown, Bill Jones, Chuck Powers, and Dave Christensen. Gary Little from the Department of Energy Savannah River Operations office (DOE-SR) attended as the Associated Deputy Designated Federal Official. Other DOE-SR attendees were Gerri Flemming, Chuck Borup, Brian Hennessey and Tom Treger. Eric Schweitzer from the U.S. DOE, Office of Accelerator Production in Washington, D.C., attended. Attendees from the South Carolina Department of Health and Environmental Control were Brent Allen and Jennifer Hughes. Constance Jones attended from the United States Environmental Protection Agency. Bectel Savannah River, Inc. attendees were G. Crotwell, Paul Huber, Sonny Goldston and Dick Harbert. The Westinghouse Savannah River Company (WSRC) attendees were Anne Roe, Gerry Stejskal, Chris Noah, Stephen King, Dean Hoffman, Gail Jernigan, Barry Shedrow, Jack Roberts, Mary Flora, Jim Cook, Dale Bignell, and Jim Moore.

P.K. Smith opened the meeting by introducing herself and asking the participants to introduce themselves. As Chairman of the RM&FU Subcommittee, P.K. Smith explained that a flyer had been mailed to CAB members and members of her subcommittee to solicit ideas and comments for two topics that would be discussed at the CAB meeting at Hilton Head on January 26 and 27. The topics were Future Activities and Risk Analysis. She then introduced Chris Noah, WSRC, the first speaker, who discussed the Future Use strategy.

Chris Noah discussed the past history of reviews with the CAB members and stated that the CAB recommendations were used as input to the Future Use Maps and were the basis for the formal Savannah River Site (SRS) policy. CAB recommendation #9 was the only recommendation not accepted. CAB recommendation #9 dealt with the request for former landowners and/or their descendants to have first option to buy back their formerly owned land if the federal government decides to sell any of SRS land. A question was asked about the two maps that Todd Crawford completed for the CAB. Chris explained that the Recommendation #2 map was a map for site clean up while the other map was a development map. It was brought up that future missions were not limited to only DOE activities, but would include both commercial and non-commercial and nuclear and non-nuclear activities. Chuck Borup, DOE-SR, explained the planning hierarchy which starts with the Strategic Plan which leads to the Comprehensive Plan and then the lower level detailed plans which detail implementation. A component of the Comprehensive Plan is the Future Use Plan. Chris Noah explained that while the Comprehensive Plan is due later in the fall, the Future Use Plan is due March 15, 1998. Therefore, WSRC and DOE-SR are requesting public involvement as soon as possible. P.K. Smith stated that her Subcommittee would be responsible for public involvement on the plan and that she would be the contact. The question was asked, with seven Future Use Maps, is DOE going to take an official position and will this new Future Use Map show how the site will look today and then in fifty years? Chuck Borup answered, Yes, this would be the site's official position and there will be a process in place if and when there is a change. A comment was made that the vision statement must be clear and far reaching. That the site was no longer a defense site, but multifaceted. Individuals were asked to put an asterisk by their name if they were interested in participating in the Future Use public involvement. The following individuals were so identified: Brent Allen, Gerald Devitt, William Pitka, Mary Flora, P.K. Smith, Karen Patterson, Lee Poe, Mike French, Tom Treger, Ron Malanowski, Ethan Brown and Todd Crawford.

P.K. Smith introduced Brian Hennessey, DOE-SR, who spoke about deed restrictions. Brian started by explaining baseline risk as a uniform standard of determining risk. When asked if there was a baseline for one small dose, he stated that there was no specific such baseline, that the affects of a large dose were extrapolated down to a smaller dose affect. Brian explained that institutional control is where the owner of the land makes sure activities that would create unacceptable risk do not take place on that land. For SRS, there are several documents that recommend that the federal government keep the land at SRS, but there is no official piece of paper that says that. However, DOE has committed to maintaining non-residential use of the land. If DOE would give the land to someone else, the government would make a deed that would preclude residential use. Several projects have deed restrictions already designated on them. It was asked if there were deed restrictions on the current surveys? Brian stated that

there were not. It was pointed out that if baseline risk is a result of probability and consequence and you fix the probability factor, then it is not a risk analysis, but a consequence analysis. Brian stated that the risk at SRS is not a risk consistent with other risk analysis, but with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) risk assessment methodology. It was asked if the analysis for non-cancer risk was the same for cancer risk. Brian said both were prescribed in the regulations. When asked what were the specific non-cancer risks that were considered, Brian stated that there were different chemicals, such as lead and mercury, that have non-cancer toxic effects on specific target organs. Brian was asked by Karen Patterson for a list of the specific non-cancer risks that were considered. A repeat question related to the deed restrictions on the surveys, lead P.K. Smith to request Brian to get with Todd Crawford to resolve the issue and report back to Bill Lawless and herself.

P.K. Smith once again stated that anyone who had input for the RM&FU Subcommittee meeting in Hilton Head should get their input to her so it could be considered in the meeting.

Bill Rajczak, WSRC, was introduced to discuss Environmental Restoration Risk Management. Bill explained that SRS is considered a Superfund site. A priority list is developed based on Environmental Restoration (ER) risk and work planned for the next two years. It was noted in the ER case, an amount of contaminant release has already occurred. Bill stated that the ER program could address approximately 80 sites a year, therefore it was necessary to identify the list of sites from the total number. Someone stated that ER should not base their decisions on risk alone, there are other considerations. Two examples that were brought up were: (1) the reactors. They represent no risk and could be cleaned up and used for storage instead of spending money on new vaults. (2) Heavy Water Components Test Reactor (HWCTR) has a very small risk but could be used as a pilot for doing other buildings. Another individual stated that there were two problems with the ranking system: (1) L Area is #2 on the list. Because it is #2, non informed citizens think this means there is great danger and that something must be done immediately. (2) Must take action because the law mandates it. It is important to understand the cancer rates factors. What is normalcy? If we knew that South Carolina had 10,000 cancer deaths, then we would better understand what 1 in 10,000 means. Someone else stated that words in documents such as ³significant health risk² were misconstrued. This did not mean that there was an actual health risk, but that it was a CERCLA risk. It was felt that these words were used as an excuse to do clean up action. Another individual pointed out that most political and social decisions were not made on scientific fact. Someone else pointed out that life expectancy is an easy and well accepted measure of risk and might be a common denominator. The only specific request that arose from this discussion was an appeal to find a way to present the ER risk in terms that would be more understandable to the layman.

Bill Lawless thanked all for attending and asked everyone to stay and attend the individual Subcommittee meetings. The meeting was then adjourned.

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