



SRS Citizens Advisory Board

Old Radioactive Waste Burial Ground Focus Group

Meeting Summary

September 13, 2000
Aiken Federal Building
Aiken, SC

The Citizens Advisory Board (CAB) Old Radioactive Waste Burial Ground (ORWBG) Focus Group met on Wednesday, September 13, 5:00 p.m. at the Aiken Federal Building. The purpose of the meeting was to review the comparative dose from the Savannah River Site (SRS) and ORWBG releases, review the Independent Scientific Peer Review (ISPR) final report comments and discuss the draft ORWBG final report. Those in attendance were:

CAB Members

Karen Patterson
Murray Riley
William Lawrence

Stakeholders

Lee Poe
Jerry Devitt
Bill McDonell
Bill Lawless

DOE/Contractors

Rod Rimando, DOE
Ed McNamee, BSRI
Don Toddings, BSRI
Elmer Wilhite, WSRC
Jim Cook, WSRC
Patricia Lee, WSRC
Jim Moore, WSRC

Lee Poe, Technical Lead, welcomed those in attendance and asked them to introduce themselves. He stated that Jimmy Mackey, the Administrative Lead, was unable to attend the meeting due to work conflicts. Rod Rimando, DOE, apologized for having to push out the presentation on the long term stewardship perspectives at other DOE sites. Mr. Rimando said he would make the presentation on October 11 and would send Mr. Poe a copy of the presentation before the meeting.

Comparative Dose from the Savannah River Site (SRS) and ORWBG Releases

Mr. Poe reviewed the radiological sampling locations and respective tritium releases to Fourmile Branch. The summary conclusions were:

- The ORWBG contributes the single largest source of tritium releases to the Savannah River.
- Fourmile Branch tritium concentration exceeds drinking water standards all the way to the Savannah River.
- The Savannah River tritium concentrations are about 1/20 of the drinking water standards.
- ORWBG contributes 32% of SRS tritium released.
- ORWBG tritium releases contribute ~12% to dose of the drinking water users.
- Drinking Savannah River water (at SRS and at water plant intakes) result in a dose commitment of 0.12 to 0.05 mrem/year or 10% of the daily dose from natural and manmade radiation.

Review the Independent Scientific Peer Review (ISPR) Final Report Comments

Mr. Poe stated that Patricia Lee and he would comment on the inclusion of their comments in the ISPR final report. Karen Patterson was to review the Environmental Protection Agency (EPA) comments and Bill McDonall would comment on the other Focus Group comments. Mr. Poe reviewed the comments from the Environmental Remediation (ER) Committee meeting held on August 22, at USC-Aiken.

The below bullets identified with a *** are the items that the Focus Group felt should be modified in the ISPR final report. The comment/discussions below were paraphrased.

In reviewing only those comments she felt had not been considered in the ISPR final report, Patricia Lee had the following comments:

- *** The ISPR report mentions several times a 10 mrem/year EPA requirement while the applicable EPA drinking water standard is 4 mrem/year according to 40 CFR 141.
- Doses such as Pu-239 are close enough to 4 mrem/year that considering the uncertainty could make them over that; this also applies to most Constituents of Interest (COIs) in their comparison to the 10 mrem/year.
- The doses could increase if other pathways such as fish ingestion are evaluated.
- Table 3 could be reduced down to the numbers actually used. This would make the tables easier to use. It is not clear where the peak concentrations provided in Table 3 are applied or which location they describe.
- The listing of inhalation dose conversion factors in Table 3A indicates that there was an evaluation of inhalation dose that is not discussed.

Mr. Poe's comments he felt had not be considered in the ISPR final report were:

- Should the analysis assume part is leachable and part nonleachable? Question this raises is how are other radionuclides treated?
- *** Reference data in diamonds should reference the Environmental Report and not Mr. Poe.
- Add a second time line to Figure 5 abscissa to show calendar years.
- The descriptive information on pages 18 and 19 say the "hydrogeologic parameters that were used in the tritium flux to Fourmile Branch were used for other COI's as well" and the full width of the ORWBG was used. What hydrogeologic parameters does this refer to? I concluded the major change was the curies of tritium and the 1,000-foot width not hydrogeologic parameters. Adding this information would make the report easier to understand.
- Add a column to Table 3 to give the period of analysis and a footnote to columns 5 and 6 clarifying that the values are cumulative transport during the analysis period. Also add clarification on column 7 indicating the of the point of measure in Fourmile Branch.

Mr. McDonnell reviewed the comments that the Focus Group sent to Dr. Karam and felt that any items that needed modified were already picked up in Mr. Poe or Ms. Lee's comments.

Mr. Poe reviewed the responses to the comments of the ER Committee of August 22.

Mr. Holcomb's comments:

- *** The first sentence in the Executive Summary says the report was "to provide an independent scientific peer review of the CMS/FS". This statement is incorrect and should be modified.

- The report says Mr. Poe supplied data saying the fraction of the total tritium that reached FM-6 that originated at ORWBG is 60% of the total. Mr. Holcomb remembered the number being 75%. It was decided that both numbers could be correct since the curies released varied from year to year.
- *** Because the report says Lee Poe supplied the data, the report is no longer independent. The data actually supplied was from the SRS Annual Environmental Report. The Focus Group felt that Mr. Poe's name should be taken out of the report and replaced with the SRS Annual Environmental Report references.
- The ISPR changes the initial model based on data supplied by Mr. Poe. Since the data supplied was from the SRS Annual Environmental Report, it is normal to change models when the results of the model being used does not produce reasonable conclusions.
- There are no error bars in any of the information therefore one cannot determine the accuracy of the data. The scope of work did not require error bars. The information requested by the scope was to provide average values.
- Based on the above, the CAB wasted \$35,000. The Focus Group thinks that the ISPR did a credible job and is finding the report useful.
- The SAIC, who worked on the CMS/FS, did not have an opportunity to review the draft report. There was no peer review. The Focus Group distributed the draft ISPR report to WSRC and DOE and requested those on distribution to send copies to those people who they thought appropriate. External peer reviewing the report would add significant cost to the report. The CAB has expressed no interest in increased cost.
- The Focus Group should have waited until the Proposed Plan was developed before requesting the ISPR report. Much of the value would have been lost if the analysis had been delayed until the SRS and the regulators had reached a conclusion on what remediation approaches meet the regulatory goals and released the Proposed Plan.

Ms. Jenkins comments:

- *** Based on the qualifications of the individuals in the ISPR, who worked on the draft ISPR report, there is no excuse for poor English. The ISPR will be asked to modify the first sentence of the report.
- Mr. Holcomb's concerns warrant further examination. The Focus Group reviewed the responses to Mr. Holcomb's comments and will be discussing them with Mr. Holcomb.
- *** Mr. Poe's name shouldn't have been in the report as having supplied information. The source should have been identified. The ISPR will be asked to replace Mr. Poe's name with the document name.
- SAIC should have had an opportunity to review the draft report. The Focus Group distributed the draft ISPR report to WSRC and DOE and requested those on distribution to send copies to those people who they thought appropriate. External peer reviewing the report would add significant cost to the report. The CAB has expressed no interest in increased cost.
- Can only assume the assumptions are appropriate. It is always appropriate to question the validity of a given assumption.
- Don't understand why EPA's comments were not addressed. Need to know from Julie (Corkran) if they were addressed. After the final report was issued, Julie Corkran sent an e-mail and said EPA was not going to review the document further. The Focus Group assigned the EPA review comments to one of the members to determine incorporation of the EPA concern. The finding of that review was that most of EPA comments had been adequately addressed in the final ISPR report.

Mr. Mackey's comments:

- Related to the second recommendation, Brendolyn Jenkins and Jimmy Mackey would not vote to extend the Education, Research and Development Association (ERDA) of Georgia

Universities contract for any additional work on the ORWBG. At this time, the Focus Group does not plan any request for extension of work.

- ***** Not satisfied with the Executive Summary. The ISPR accommodated that request and added a two and a half page executive summary. However, the Focus Group will ask the ISPR to clarify two technical terms in the executive summary: partition coefficient and committed effective dose equivalent.**

It was decided by the Focus Group that Mr. Poe would revise the responses to the comments from the ER Committee. Bill Lawless and Jim Moore would review the responses with Jimmy Mackey, Brendolyn Jenkins and Perry Holcomb. After the review, the responses would follow the normal distribution to members of the ER Committee.

Mr. Poe passed out a draft outline for the Focus Group final report and requested that everyone respond with comments by September 27 so they could be discussed at the next meeting on October 11. At that time responsibilities will be assigned for writing the appendices. Mr. Poe requested that the members volunteer for those sections they would like to write.

Mr. Poe also passed out Key Conclusions that had been reviewed at the last meeting. He requested that any comments also be sent in by September 27.

Mr. Poe reminded everyone that the next meeting was October 11, 5:00 p.m., at the Aiken Federal Building and adjourned the meeting.

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