SRS Citizen's Advisory Board

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Risk Management Working Group - Team A

Meeting Summary

December 8, 1999
District Office of DHEC
Aiken, SC

Team A – Risk Analysis – of the Citizens Advisory Board (CAB) Risk Management Working Group met on Wednesday, December 8, 1999, 5:00 p.m. at the District Office of the Department of Health and Environmental Control (DHEC) in Aiken. The purpose of the meeting was to hear about the permitting risk analysis, review previous presentations and discuss a final Team A report. Those attending the meeting were:

Stakeholders	DOE/Contractors
Jennifer Hughes, DHEC	Wade Whitaker, DOE
Lee Poe	Don Gordon, WSRC
Todd Crawford	Jim Moore, WSRC
Jerry Devitt	

Jennifer Hughes, Team A lead, welcomed those in attendance as reviewed the meeting agenda. She then introduced Don Gordon, WSRC, to talk about risk analysis in permitting.

Mr. Gordon stated that he would review the environmental protection standards, the Savannah River Site (SRS) Environmental Management System Policy, risk assessment factors in the permitting process, mercury permitting limits issue and then give a summary.

Mr. Gordon stated that Department of Energy (DOE) Order 5400.1 established requirements that DOE comply with federal, state, and local environmental laws and regulations. The major laws are the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). The SRS Environmental Management System Policy states, "...SRS…will conduct operations in compliance with the letter and spirit of all applicable federal, state, and local laws, regulations, statutes, executive orders…" and is signed by all senior level management of SRS contractors and DOE. Mr. Gordon explained the environmental regulatory process that starts with the enactment of congressional legislation and ends with the site demonstrating regulatory compliance. Mr. Crawford requested that the Environmental Management System Policy be sent to all CAB members. Mr. Crawford also pointed out that many times the public is told that something can't be changed because it is a law when it is not a law, but a regulation. Wade Whitaker stated that when a standard is attempting to be enforced by a regulator that does not make sense, the site does not blindly except the standard, but goes back to the regulators to reach a compromise. Mr. Whitaker said this is what is called regulatory flexibility.

In reviewing the risk assessment factors associated with the Clean Air Act, Mr. Gordon noted that exposure to air pollutants is linked to respiratory ailments, reduction in lung function, premature deaths, etc. The standards are set to minimize human health impairment and based on scientific studies.

In risk assessment factors for the Clean Water Act, most ambient water quality standards for human health protection are tied to risk of latent cancer fatalities of 10–5 to 10–7. The ambient water quality standards for aquatic life are based on toxicity to organisms such as plankton, fish, shellfish, wildlife, and plant life. The aquatic life standards are usually lower than human health standards. For the Safe Drinking Water Act, most maximum contaminant levels for primary drinking water standards are based on risk of latent cancer fatalities of 10-5 to 10-6. Other maximum contaminant levels are based on damage to kidneys, liver, and nervous systems in animals and humans. There is no overall permitting process for safe drinking water, except for construction permits to build water treatment plants. There are 101 primary drinking water standards and 15 secondary standards.

CERCLA has a separate, distinct process for determining risk associated with environmental remediation activities. RCRA defers to safe drinking water limits for groundwater protection standards. Todd Crawford asked if the tritium limits being enforced for the surface water on the seepline of the Old Radioactive Waste Burial Ground are laws or regulations? Mr. Gordon said he was not sure and would check.

Mr. Gordon reviewed the issue with the ambient waste quality criteria (AWQC) for mercury. He stated that scientific studies on 28 genera of fresh water animals were used in development of the mercury AWQC equal to .012 micrograms/liter (ug/L). The human health standard for mercury is .050 ug/L. The latest Environmental Protection Agency (EPA) recommendation for AWQC for aquatic life equals .770 ug/L, but is not yet adopted by DHEC. Mr. Gordon noted that there are only a couple labs in the United States that can measure accurately to that level and none of them are located in South Carolina. SRS is seeking regulatory flexibility on permit limits for mercury in wastewater effluents.

In summary, Mr. Gordon stated that risk assessment factors are incorporated into permit limits or standards with which SRS must be in compliance and that the SRS environmental policy is to meet all regulatory requirements and commitments.

Mr. Gordon said he would review the risk matrix developed by Todd Crawford for accuracy in the Clean Water Act, the Clean Air Act, and RCRA.

Ms. Hughes thanked Mr. Gordon for his presentation.

After discussion on the path forward for Team A, it was decided that Mr. Moore would determine if for the Vulnerability Assessment and the Decontamination and Decommissioning risk assessment there are additional risk analysis over and above meeting the regulatory standards. If there were none, then these two presentations will be removed from the list.

It was discussed that the draft outline for the final report and assignments of team members for each section are as follows:

Outline:
Introduction (Why were we formed) - Jennifer Hughes
Summary Conclusion - Lee Poe

- Reviewed X SRS risk approaches
- Conclusions

D etails (Summary of each) - Lee Poe to send example to Lynne McGrath. Lynne develops summaries
Appendices

- Matrix/Definitions - Todd Crawford
- Supplemental Page - Lynne McGrath
- SRS Risk Summaries - Jerry Devitt

It was determined that all drafts should be sent to Mr. Moore before the next meeting so they could be consolidated. (Please have drafts to Mr. Moore by January 20.) In keeping with the assignments, Ms. Hughes requested a copy of the notes from the first Risk Management and Future Use Subcommittee where Ms. Smith requested the initiation of the Risk Management Working Group. Mr. Devitt requested a copy of the Virginia Kay and Mary Flora letter.

The next meeting will be January 26, 2000, 5:00 p.m., at the DHEC District Office. The purpose will be to review the drafts of the final report. The Vulnerability Assessment and/or the Decontamination and Decommissioning risk assessment will be scheduled if appropriate.

With no other comments, Ms. Hughes adjourned the meeting.

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