SRS Citizen's Advisory Board

SRS Citizens Advisory Board

Environmental Remediation Committee

Meeting Summary

April 25, 2000
North Augusta Community Center
North Augusta, SC

A meeting of the Environmental Remediation (ER) Committee of the SRS Citizens Advisory Board (CAB) was held on April 25, 2000 at the North Augusta Community Center. Those attending included:

CAB Members	Stakeholders	DOE/Contractors
Jimmy Mackey*	Lee Poe	Mary Flora, WSRC
Kathryn May*	Lynn Waishwell	Jerome Morin, WSRC
Maria Reichmanis*		Gerry Stejskal, WSRC
Perry Holcomb	**Regulators**	Gary Hoover, DOE
Murray Riley*	Julie Corkran, EPA	Don Toddings, BSRI
Beaurine Wilkins*	Keith Collinsworth, SCDHEC	Lee Davis, DOE
		Ollie Carter, DOE
		Ron Malanowski, WSRC
		Ed McManee, BSRI
		Jim DeMass, DOE
		Gerri Flemming, DOE
		Ruthie Geraci, DOE
		Dale Bignell, WSRC
		Bill Erickson, DOE
		Mary Windmiller, DOE
*Denotes Committee member		Rod Rimando, DOE

Jim Mackey, Environmental Remediation (ER) Committee Chair, called the meeting to order and reviewed the meeting agenda. Following introductions, Mr. Mackey called for public comments. Lee Poe noted his concern with the Citizens Advisory Board (CAB) plans to hold monthly committee meetings. He believes that the monthly committee meetings will hinder citizen participation, particularly when the committee meetings are scheduled concurrently. He noted that scheduling the day-long meetings every other month are insufficient to cover the items the committees need to address; additionally, it will be difficult to maintain continuity between meetings over such an extended period. With no other public comments, Mr. Mackey thanked Mr. Poe noting that scheduling the meetings in this manner is a pilot project and the CAB will evaluate the outcome after August 2000. Mary Flora reviewed the ER Committee Issues matrix and asked that any additions or changes be provided to Paul Sauerborn prior to the next Committee meeting.

Old Radioactive Waste Burial Ground Focus Group Status Report

Lee Poe, Technical Lead for the Old Radioactive Waste Burial Ground Focus Group (ORWBG FG), opened his presentation by stating that the ORWBG FG was formed to study the human health risk that may result from the ORWBG and to evaluate remediation plans for the ORWBG. He provided an overview of the use, size, and location of this disposal facility. He then discussed the presence of four groundwater plumes from the ORWBG and the Mixed Waste Management Facility. The Southwest (SW) and northeast plumes are the largest, while the southeast plume is very small. The most significant contaminants are found in the ORWBG, and the contaminants in the plumes are tritium and volatile organics (primarily trichloroethylene, or TCE). The SW plume flows to the Four Mile Branch stream. Mr. Poe reported that the ORWBG FG has sponsored an Independent Scientific Peer Review that is being conducted by the Education, Research and Development Association of Georgia Universities (ERDA) to determine if adverse human health effects exist or may result from the contaminants from the ORWBG. To date, ERDA has found no significant risk, however the evaluation is still on going. The FG will report back to the ER Committee as it evaluates other contaminants, including plutonium, carbon-14 and mercury, and considers the CERCLA feasibility study results and recommended final remediation strategy.

Perry Holcomb asked for clarification on why remediation is required if institutional controls are in place to prohibit future residents and whether it was reasonable to use primary drinking water standards as the basis for groundwater remediation plans if there was no likelihood of anyone drinking the groundwater. Mr. Poe responded that is a topic the ORWBG FG is evaluating with the regulators, SRS and ERDA.

ACTION: ORWBG Focus Group will provide status reports and recommendations to ER Committee, as needed.

Toxicity Testing Challenges at SRS Wastewater Outfalls

Don Gordon, WSRC, opened this presentation noting that SRS is conducting biological testing at its outfalls to determine the toxicity of SRS wastewater discharges. This testing is required in the National Pollutant Discharge Elimination System (NPDES) permit issued to SRS by the South Carolina Department of Health and Environmental Control (SCDHEC). This test, the Whole Effluent Toxicity (WET) Test, uses the *Ceriodaphnia dubia* species water fleas' mortality and reproducibility rates to determine if the wastewater introduced into a stream meets toxicity requirements. SRS has experienced high rates of toxicity testing failures using the WET Test, which violates the limits specified in the 1997 NPDES Permit. In 1999, 7 of the 10 exceedances at the A-01, A-11 and X-08 outfalls were due to toxicity. EPA is currently reviewing the enforcement action associated with these toxicity exceedances.

Mr. Gordon noted the SRS concerns about the WET Test include: the current test method may be inaccurate because SRS has performed analytical tests on the wastewater and hasn't detected any contamination that would be causing the toxicity failures; the *C. dubia* species seems to be unable to reproduce and survive in the naturally soft waters of this region; and, the *C. dubia* species is not native to this area. Therefore, SRS is evaluating the use of another species of water flea that is found locally in farm ponds, the *Daphnia ambigua*, and will conduct tests comparing the two species. The results of these comparison tests will be provided to EPA. Additionally, SRS will continue performing analytical tests to determine if the toxicity exceedances are resulting from specific contaminants, working with other companies and municipalities in this region that are experiencing the same problems using the current toxicity method. Mr. Gordon said SRS is optimistic that the alternate species investigation plan will be resolved prior to the NPDES Permit expiration in 2001.

Lee Poe asked if the headwaters of Upper Three Runs Creek (UTRC) and the Savannah River water had been tested to determine if the fleas could survive? Mr. Gordon answered that SRS had found that the fleas were unable to survive in UTRC headwaters, but no testing had been conducted on water from the Savannah River. Murray Riley inquired about the source of the fleas if they are not indigenous to this region and was told they are purchased from supply firms. Perry Holcomb asked if the flea was used at local water treatment plants and was told they were, but that the treated water from these plants was harder than the SRS stream water. Mr. Poe suggested hardening the water to see if the fleas would

survive and Mr. Gordon agreed this could be done. Beaurine Wilkins asked how much money is spent on toxicity testing and Mr. Gordon responded that the testing cost several thousand dollars a year. Mr. Gordon agreed to return to the Committee and provide an update on the alternative species investigation and the work with EPA.

ACTION: SRS will provide an update on the Toxicity Testing program to the ER Committee.

Total Maximum Daily Load (TMDL) for Mercury in the Savannah River Basin

Bill Payne, WSRC, introduced his presentation by defining a TMDL as the amount of a pollutant that a waterbody can receive and still meet water quality standards. TMDLs are required by the Clean Water Act (CWA). States are required to prioritize surface waters based on how well the waterbody can take up pollutants without negatively impacting the stream and from this list of impaired waters, develop the appropriate approaches to clean them up. In this region EPA issued the TMDL for mercury for the Savannah River Basin streams, after the State of Georgia failed to issue mercury TMDL and was subsequently sued by the Sierra Club. The mercury TMDL of 1 part per trillion (1 ppt) issued by the EPA was based on the fish advisories for Georgia rivers, which contain mercury. EPA held a public comment on the mercury TMDL through April 10, 2000 and, unless the courts issue an extension, this TMDL will become effective on June 7, 2000. EPA is currently reviewing the public comments and will request an extension for issuance of the TMDL.

Mr. Payne noted the impacts from this TMDL will be significant not only for SRS, but for other companies in this region if it stays at its current concentration of 1 ppt. At SRS there are streams that do not receive any mercury from wastewater releases at all; however, these streams will not be able to meet the current TMDL, due to deposition from atmospheric mercury, which comes from sources other than SRS. Additionally, Mr. Payne noted that the wastewater treatment technology that is currently available is not capable of treating the water to 1 ppt. SRS is working with the Olin Corporation and EPA to help define a more realistic final TMDL, by performing mercury analyses of surface water from streams in the Savannah River Basin. Jimmy Mackey noted that this might be an opportunity for the EPA to exercise its Regulatory Flexibility Act.

Integrator Operable Units Status Update

Ron Malanowski, BSRI, reviewed the Integrator Operable Unit (IOU) strategy with the ER Committee. He showed a map of the SRS that delineated the six IOUs, noting that the five surface streams and the Savannah River and its swamp made up the IOUs. He reviewed the three phases of the IOU program and provided a schedule of when the IOU workplans would be submitted and the Phase I field start would begin. He noted that the number of significant comments generated by the EPA and SCDHEC on the Revision.0 Steel Creek IOU workplan showed that the SRS didn't clearly communicate the IOU strategy originally. Working closely with the regulators to more clearly define and determine the IOU scope and process, helped SRS develop an improved Steel Creel IOU workplan, that when reviewed a second time, resulted in only minor comments. For the Steel Creek IOU, the Revision.1 workplan will be updated and re-submitted in late May 2000, while field sampling is scheduled to begin the week of May 1, 2000. Mr. Malanowski closed by saying the Savannah River/Swamp IOU Revision.0 workplan would be provided to the regulators and the ER Committee for a 120 day review on May 1, 2000 and SRS would review the workplan with the ER Committee at its May meeting.

ACTION: SRS to review the Savannah River/Swamp Workplan with the ER Committee in June 2000.

Receiving no public comments during the final public comment session, Jim Mackey thanked everyone for attending and adjourned the meeting.

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