

# SRS <u>C</u>itizens <u>A</u>dvisory <u>B</u>oard

# **Environmental Restoration Committee**

### Meeting Summary

June 19, 2001 North Augusta Community Center North Augusta, SC

#### **CAB Members**

Maria Reichmanis\* Jimmy Mackey\* Murray Riley\* Perry Holcomb\* Wade Waters William Lawrence Jerry Devitt

#### **Stakeholders**

Lee Poe Rick McLeod C.J. Banick Charles Ervin Bill Mcdonell Dusty Houser Sam Booher Russ Messick Tom Rolka

#### **Regulators**

Charles Gorman, SCDHEC Sharon Cribb, SCDHEC

#### **DOE/Contractors**

Bill Rajczak, WSRC Louisiana Wright, WSRC Ed McNamee, BSRI de'Lisa Bratcher, DOE Don Toddings, BSRI Paul Sauerborn, WSRC Ron Malanowski, WSRC Thomas Johnson, DOE Paul Huber, BSRI Janet McClearan, BSRI Elmer Wilhite, WSRC Teresa Haas, WSRC Ken Crase, WSRC Ron Beul, BSRI

#### \*Members of the ER Committee

\*\*The following are members of the ER Committee that were unable to attend the meeting: Sallie Connah and Nancy Ann Ciehanski.

#### Introduction

Jimmy Mackey introduced himself and then asked that everyone do the same.

#### **Schedule Review**

Paul Sauerborn presented the schedule for the ER Committee. Mr. Sauerborn stated that he has been requested to have the schedule for the meetings available for every ER Committee meeting. Mr. Sauerborn also noted that the schedule shows both completed and future meeting topics and should any of the public have topics they would like considered by the ER Committee, to please state them now or call his office. Sam Booher said that he would like to have an update on Carolina Bays that exist at SRS. Mr. Mackey wants to have a presentation on the mixing zone concept as it applies to SRS. Lee Poe stated his desire to have an update on a proposed RCRA permit modification at the F&H Area seepage basins.

#### ER Mid-year Review

Ron Beul presented a synopsis of the major activities by area for the ER Program at SRS. Mr. Beul stated that SRS continues to make significant progress in environmental restoration through innovative technologies and cost effectiveness. Risk reduction continues to be a major objective. Mr. Beul noted that 40% of the ER sites have been reduced to zero risk through closure or completion, and that groundwater plume management remains a priority. Mr. Mackey expressed concern that if SRS shows cost savings and efficiencies, that the savings would be re-deployed elsewhere in the DOE complex. Paul Huber stated that the money would remain at the site and used for other emergent project work within the program.

Mr. Beul offered the following accomplishments:

- Tritium Remediation
  - Mixed Waste Management Facility (Southwest Plume)
    - Phytoremediation (interim measure) is in operation
  - C-Area Reactor Groundwater
    - Phytoremediation in Planning Stages
- Solvent Remediation
  - A/M Area Groundwater Plume
    - Dynamic Underground Stripping Near Completion
    - **Conventional Remediation Methods in Operation**
  - Non-Radioactive Disposal Facility
    - Bioremediation Ahead of Cleanup Schedule
- Radionuclides in Soil Remediation
  - SRL Seepage Basins
    - Soil Disposal Complete; Waste Unit Complete
  - L-Area Oil and Chemical Basin
    - In-Situ Grouting complete; Waste Unit Complete
  - F-Area Retention Basin
    - In-situ Grouting Complete; Waste Unit Complete
  - K-Area Reactor Seepage Basin
    - In-Situ Grouting Completion Expected by end of FY01
  - C-Area Reactor Seepage Basin
    - In-Situ Grouting Nearing Start-up
- Sharing Innnovative Technologies
  - Environmental Restoration Technology End User Conference (ERTEC 2001) planning
  - Dynamic Underground Stripping presentation to SCDHEC
  - Sharing Lessons Learned on Post Closure Monitoring and Maintenance with DOE-Fernald
  - SRS Cleanup Technologies made the Cover Story of Pollution Engineering Magazine (April 2001)
- Safety
  - Voluntary Protection Plan awarded
  - o Site milestone achieved / Environmental Restoration Division milestone achieved

<u>Responses to Findings of Independent Inspection of the SRS Environmental Monitoring and</u> <u>Surveillance Program</u> Jim Heffner began his presentation by stating that the Audit results were very positive and that the areas for improvement identified 3 issues and 7 observations. The issues and observations are as follows:

 Issue 1 – SRS Does not meet several requirements; Settleable Solids, Technicium-99, Stormwater basin sediment.

Response – The Site will review total suspended solids annually, will add a Technetium-99 analysis, and will analyze select stormwater basin sediments for Strontium, Plutonium, gamma.

• Issue 2 – SRS criteria for posting soil contamination areas do not meet requirements.

Response – 100 millirem limit protects workers. Same limit is used for all exposures. Public exposure is unlikely. Soil, as volume-contaminated, would not be released. No changes planned at present; working with regulators on offsite posting.

• Issue 3 – SRS groundwater monitoring program is not fully integrated.

Response – SRS will correct defieciencies.

• Observation 1 – Liquid effuent sampling is not always representative.

Response – SRS considers existing sampling complaint. No changes are planned.

• Observation 2 – Inventories of potential discharge points have not been maintained.

Response – SRS will update drainage maps to ensure all discharge points are known.

• SRS risk based approach has not been fully implemented.

Response – Monitoring plans will be updated; discharge points will all be categorized by risk.

• Observation 4 – Radiological dose associated with air surveillance network is not adequately delineated in the Annual Report.

Response – This dose will be calculated and described in future Annual Reports

• Observation 5 – Radiological surveys at inactive facilities should be established at some minimum frequency in addition to "upon entry".

Response – Survey "upon entry" are adequately protective. If contamination is suspected, surveys are performed.

 Observation 6 – SRS stack flow measurement calibrations are performed shortly before stack flow testing.

Response – Flowmeter calibrations had been performed shortly before stack tests. Calibration practices and schedules will be revised.

 Observation 7 – SRS air filter collection practices do not adequately protect sample integrity.

Response – Procedure revisions and retraining will be implemented.

Mr. Heffner pointed out that the Proposed Corrective Action Plan is being evaluated at DOE-HQ, and that acceptance or guidance is due very soon. Mr. Heffner stated in conclusion that the audit was thorough and professional, that SRS agrees with most issues and findings, and the Corrective measures are proceeding.

#### **ORWBG Focus Group Final Report Review and DRAFT Recommendation Review**

Lee Poe stated that for the benefit of the public and others that may not have attended the meeting in Savannah, Ga. regarding this topic he would repeat it this evening unless there were objections. Being no objections, Mr. Poe delivered the following to those in attendance.

Mr. Poe stated that what he is presenting was the culmination of a 2.5 year study by members of the ORWBG FG on the risks presented by the ORWBG, and draws conclusions and makes recommendations on needed remediation of the ORWBG. The FG also reviewed SRS and regulator documents on planned remediation. Mr. Poe stated that Human Health was the primary criteria, and that regulatory drivers were divorced from the report. Mr. Poe stated that the comments were in on the final report and that DOE and the regulators did not comment. Chuck Gorman SCDHEC clarified by stating that it was difficult for him to comment when his job is to enforce the regulations and therefore no comments were provided.

Mr. Poe stated the goals of the FG were twofold:

- 1. Cleanup/remediation should be performed only if human health consequences and risk posed by the ORWBG are significant.
- 2. Remedial actions should provide significant improvement in human health and be cost effective.

As far as the objectives of the FG there were two:

- 1. To determine if ORWBG currently causes or will cause future health risks.
- 2. Identify risk migration if risk levels cause significant human health risks now or could cause them in the future.

Mr. Poe identified the following report status and plans:

- The report is now complete.
- Copies of the report have been distributed to DOE, WSRC, SCDHEC, and EPA for technical accuracy review in the next several days.
- Copies were also distributed to ER committee for information.
- Technical accuracy and ER Committee comments were returned to FG for consideration and incorporation by June 20, 2001.
- Issue Report on July 18, 2001.
- Present Final CAB Recommendation at the ER Committee meeting July 23, 2001.
- ER Committee presents proposed ORWBG Recommendation to the CAB for acceptance on July 24, 2001.

Mr. Poe identified all the participants of the FG and the layout of the FG report. Mr. Poe stated that the FG report summary, conclusions and recommendation were as follows:

#### **Summary**

- No health effects to individuals from ORWBG contaminants released to water now or in the future.
- Institutional Controls must be maintained.
- No health effects from contaminants left buried in the ORWBG with Institutional Controls.
- Institutional Controls eliminates the need for regulatory actions.

#### **Conclusion**

- Institutional Controls are part of the Long Term Stewardship Program and the Land Use Control Assurance Plan. Needed controls for the ORWBG should be institutionalized soon.
- ORWBG does need some remediation. The proposed remediation is slightly different from the current proposed by SRS.

Report proposed remediation is to

- stabilize and cover solvent tanks with low permeability clay soil cover

- develop and implement a land management concept to ensure minimal surface erosion and keeps deep-rooted plants and burrowing animals off the surface of the ORWBG

#### **Recommendations**

- 1. Cease the current collection of tritium containing groundwater and irrigation of SRS forests ASAP.
- 2. Develop IC for ORWBG and the area between ORWBG and FMB.
- 3. Fill solvent tanks with grout and cover the portion of the ORWBG with low permeability soil to match the rest of the ORWBG.
- 4. Develop a land management strategy to minimize erosion, prevent deep-rooted plants from encroaching, and discourage burrowing animals and insects from bringing water to the surface.
- 5. Consider refining the groundwater transport calculations for Volatile Organic Compounds and other Constituents of interest to be consistent with measured concentrations in the groundwater.
- 6. Do not excavate buried waste form the ORWBG.
- 7. Establish mixing zone for the ORWBG groundwater plume considering the controls provided active and passive institutional controls.
- 8. Do not develop remedial actions (except to minimize immediate risks) until both active and passive IC's have been developed. Stewardship and land Use Control Assurance programs should establish future land use and needs for controls on the land

#### CAB ER Recommendation Status Update

Mr. Mackey identified the following CAB ER Recommendations for review and consideration for change:

Rec. 134 Current status – Pending Proposed status – Open (update required)

- Rec. 123 Current status Pending Proposed status Closed
- Rec. 122 Current status Pending Proposed status Open
- Rec. 117 Current status Open Proposed status Closed
- Rec. 114 Current status Open Proposed status Closed

## Rec. 113 Current status – Open Proposed status – Closed Rec. 7 Current status – Open Proposed status - ? (CRESP to give update)

#### Public Comments

Mr. Mackey thanked the attendees, and the meeting was adjourned.

For copies of meeting handouts call 1-800-249-8155.