

Spring 2001

Engineered Trench Now Operational at SRS

Due in large measure to the involvement of the Citizens Advisory Board, SRS has been able to begin disposal of low level waste with extremely low radioactive content in engineered trenches while still protecting the environment and the public. On February 13, 2001, the SRS Solid Waste Division commenced operations of the Low Level Waste Engineered Trench #1 (ET #1). This "drive-in" trench, located inside E-Area, is designed to extend the useful life of the existing Low Activity Waste Vaults (LAWV) and allow shallow land burial of selected low level waste. ET #1 is designed and constructed to safely store approximately 330,000 cubic feet of low level waste. A large percentage of waste (~65%), currently stored in the existing LAWV, is candidate for future trench disposal. This approach will enable the more robust LAWVs to be reserved for higher activity low level waste.

The Engineered Trench measures 200' L x 20' D. It is equipped with a concrete sump and pump system (including sample station) to handle anticipated rainfall. The sump contents are sampled, and provided they meet acceptable release criteria, are pumped to an existing site outfall. The design of the trench also enables the existing sump system to be utilized for future trench expansion. The trench is also equipped with a vadose zone monitoring system (VZMS) which is installed around the perimeter. This system monitors the trench's impact to the groundwater and is used to validate the Performance Assessment. Ten wells are installed, which house approximately 70 instruments and allow determination of the direction and magnitude of contaminants that may migrate from the trench. With the ET #1 now fully operational, SRS expects to extend the valuable and expensive LAWV space until 2024. ■



Aerial view of ET #1 just prior to becoming operational.

Storing B25 boxes in ET #1 will extend vault space at the LAWV until 2024. ↓



↑ The Vadose Zone Monitoring System monitors ET #1's impact to the groundwater and validates the performance assessment.

In This Issue:

SRS CAB Says Goodbye to Original Board Members	2
We Need Interested Volunteers	2
Recent Recommendations Highlighted	3
SSAB Sanction Long-Term Stewardship Recommendations	4
SRS CAB Members Tour Sites	5
Member Spotlight	6
Dynamic Underground Stripping in M-Area	7
SRS CAB Approves Work Plan	7
Upcoming 2001 Board Meetings	8

SRS CAB Says Goodbye to Original Board Members



Greg Rudy, DOE-SR Manager (far right), with Board members stepping down from membership (left to right) Lane Parker, Beaurine Wilkins, Tom Costikyan, Kathryn May, P.K. Smith, Bill Adams and Georgia Leverett (not available for photograph).

In January, five remaining original Board members stepped down from the Board after having served three consecutive terms since February 1994. The only SRS CAB members to serve seven years, these individuals began their tenure with a three-year term to stagger annual membership turnover.

Tom Costikyan, Kathryn May, Lane Parker, P.K. Smith and Beaurine Wilkins were recognized by SRS DOE Manager Greg Rudy in a brief ceremony held January 23, 2001, on Hilton Head Island, SC. All had served as committee chairs for extensive periods and were honored for their major contributions to the SRS CAB. Board members Bill Adams and Georgia Leverett were also recognized for their service, both of whom decided not to run for re-election to the Board in 2001. ■

WE NEED INTERESTED VOLUNTEERS

- ✓ **Ever wonder about what is going on at SRS?**
- ✓ **Interested in learning more about how SRS impacts your community?**
- ✓ **Do you have the time to work with dedicated neighbors on environmental issues?**

IF YOU ANSWERED "YES" TO THESE QUESTIONS, THEN THE SRS CITIZENS ADVISORY BOARD NEEDS YOU

The SRS Citizens Advisory Board is soliciting applications from interested citizens in Georgia and South Carolina to run for membership in 2002-2003. Currently, our strongest needs are for minority and female representatives in Georgia. However, all interested candidates should apply because we keep applications on file for several years to fill vacancies as they become available.

Board membership requires a time commitment of approximately 10-15 hours per month and includes attending meetings, active participation on at least one issues-based committee and preparing for meetings by reading materials and keeping up to date on SRS issues.

Please call

the SRS CAB Administrator toll free at 1-800-249-8155 to receive an application packet by mail. The application is also available for downloading at www.srs.gov/general/people/srs-cab/cabapp/cabapp_1.html or email dawn.haygood@srs.gov.



Recent Recommendations Highlighted

Since the last publication of this newsletter, the following recommendations have been initiated by the SRS Citizens Advisory Board:

Environmental Assessment for the Transportation of SRS MLLW and Certain LLW for Treatment and Disposal at Commercial and Government Facilities

The Board provided public comments on an Environmental Assessment for Offsite Transportation of Low Level Radioactive and Mixed Waste. They requested additional clarification on the level of controls and oversight that will be implemented at the commercial facilities receiving waste shipments, specifically whether DOE plans on conducting annual audits of these facilities. They also asked for more information regarding "exclusive use vehicles."

Mound Transuranic (TRU) Waste Shipments to SRS

The CAB recommended that DOE accept transuranic waste shipments from Mound and that DOE receive approval to ship more TRU waste volume from SRS to the Waste Isolation Pilot Plant (WIPP) than it receives from Mound. The Board also requested that DOE provide non-SRS funding to not only transfer the Mound waste to SRS but to fund all activities necessary to accelerate SRS TRU waste shipments to WIPP.

Consolidated Incineration Facility (CIF) RCRA Part B Permit Modification

The Board recommended that the SCDHEC CIF permit modification recognize the need for adequate time for the full development, implementation and operation of an alternative treatment technology before CIF closes.

Release of Radioactive Scrap Metal

The SRS CAB recommended that DOE-HQ abandon any plans to pursue a dedicated steel mill to recycle metals in the DOE complex and instead utilize its time and resources to work aggressively with the Nuclear Regulatory Commission to establish national release standards for volumetrically contaminated metals. The Board also asked DOE-SR to develop and certify a program for the control and release of personal property that meets the revised DOE Order 5400.5 and includes a public participation program.

Water Quality Standards 2000 Revisions

The SRS CAB recommended that the Water Classification and Standards Regulation 61-68 remain the same for the hardness value until an environmental gain can be demonstrated to justify the economic expense.

High Level Waste Annulus Cleaning

Concerned about the low priority SRS appears to be placing on annulus cleaning, the SRS CAB recommends that: (1) SRS develop, test and have a method for annuli cleaning ready for use no later than 2007, (2) SRS develop a HLW tank annulus cleaning plan with a schedule for demonstration of elements of the program to meet the above date and present the plan to the Waste Management Committee before the end of July 2001, and (3) SRS provide periodic HLW tank annulus cleaning program updates to the Waste Management Committee containing applicable technologies and funding status.

Technology Investigation for PUREX Treatment and Incineration

The SRS CAB has been following two DOE-HQ investigations for PUREX treatment and incineration. The first is a panel of independent scientific experts (known as the Blue Ribbon Panel) exploring technological alternatives to incineration; and the second a Headquarters Study Team, which is assessing the demand for incineration within the DOE complex. The SRS CAB recommends that:

- DOE-HQ use the alternative technology recommendation from the Blue Ribbon Panel (BRP) to address specific waste streams at the Idaho National Engineering and Environmental Laboratory (INEEL) but not expand the BRP's evaluations to different waste streams at SRS.
- The Headquarters Study Team consider operational improvements to existing DOE incineration technologies when it evaluates commercial treatment methods.
- DOE-SR continues to include incineration or, more specifically, the enhancement of CIF in its investigation for the best available technology to treat PUREX waste.
- DOE-SR considers and justifies any potential delays in the treatment of PUREX waste caused by using new emerging technology versus the use of the already existing CIF.

Site Specific Advisory Boards Sanction Long-Term Stewardship Recommendations

On October 26-27, 2000, the Rocky Flats Citizens Advisory Board hosted members from ten Environmental Management Site-Specific Advisory Boards (SSAB) at a Stewardship Workshop in Denver, Colorado. The goal was to discuss issues related to long-term stewardship at Department of Energy (DOE) nuclear weapons complex sites. Each site provided a brief presentation on stewardship activities and issues from their perspective, as well as information related to DOE's stewardship plans for their sites. Attendees also participated in breakout sessions regarding core topics and heard from DOE-Headquarters representatives. SRS Citizens Advisory Board participants included P.K. Smith, Beckie Dawson, Jean Sulc, Wade

Waters and Mike Schoener. P.K. Smith presented issues of concern to the SRS CAB during the workshop.

Meeting participants agreed by consensus on a few "big picture" recommendations regarding longterm stewardship (see below), which were then taken back to the full membership of all ten SSABs for endorsement. At a recent EM SSAB Chairs meeting, nine of the ten Board Chairs agreed to forward these recommendations to the Department of Energy. The tenth Board had not yet discussed the recommendations, and upon review and endorsement they will be resubmitted. Several Boards took issue with various segments of the recommendations and have or will address these issues individually with DOE-Headquarters.

RECOMMENDATIONS ON LONG-TERM STEWARDSHIP

PREAMBLE

The nationwide Environmental Management Site-Specific Advisory Boards (EMSSABs) recognize that the U.S. government faces an enormous challenge. Radioactive and toxic legacy wastes and contamination related to past government practices affect many communities. Some of these materials will pose a threat to human health and the environment for a very long time.

Therefore, the EMSSABs recommend that the Department of Energy (DOE) take the following steps to ensure that Long-Term Stewardship (hereafter referred to as "stewardship") for contaminated sites is a major focus for the Department.

FUNDING

- Make guaranteed funding for stewardship a national priority, removed from the annual Congressional appropriations process, and maintained off-budget. Stewardship funds must be protected from the demands of other programs. Stakeholders must be involved in the development of a fair allocation process. To meet these objectives, DOE must develop authorizing legislation for submittal to Congress.

ROLES AND RESPONSIBILITIES

- Issue a stewardship policy by December 2001 that addresses:
 - Legal basis (law)
 - On-going review
 - Allowance for site-specificity
 - Continuing research and development
 - Funding
 - Stakeholder involvement

- Expedite the issuance of policy, orders, guidance and training to institutionalize and implement the stewardship commitment.
- Require all sites to develop and issue stewardship plans, with the involvement of all stakeholders, no later than June 2002. The plans must identify specific roles and responsibilities for all parties that will be involved in implementation.

TIMING OF STEWARDSHIP

- Make stewardship part of the remediation selection process and enforceable in decision documents. Due to the long-term nature of stewardship, remediation decisions must be revisited periodically to evaluate new technologies, changing land use, changing risk evaluation, and information needs. In areas where it was not previously considered, stewardship should be added to existing decisions.
- Consider stewardship in on-going site operations and plans for new facilities.

INFORMATION MANAGEMENT

- Identify in each site stewardship plan, with stakeholder involvement, the information required by current and future generations to effectively manage stewardship.
- Include the preservation and dissemination of historical and cultural information as required components of cleanup and stewardship.

PUBLIC INVOLVEMENT

- Provide education and communication activities to encourage and facilitate early, informed and regular involvement of stakeholders and State, Tribal, and Local Governments in all stewardship decision-making processes.
- Respond in an effective, factual, and timely manner to questions and concerns submitted by stakeholders and State, Tribal, and Local Governments.

SRS CAB Members Tour Sites



The **Environmental Remediation Committee** hosted a half-day tour on Tuesday, March 20, featuring the following various technology deployments:

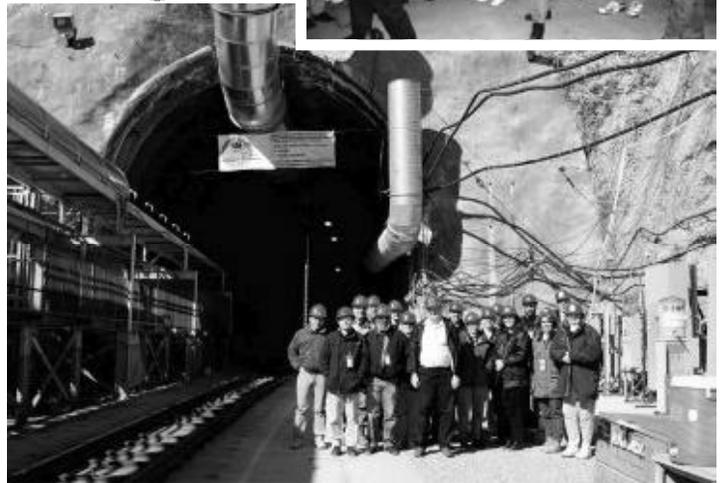
- Dynamic Underground Stripping (steam stripping and removal of DNAPL)
- Phytoremediation Test Plot at the D-Area ash basin
- Grouting of the K-Area Reactor Seepage Basin
- Mixed Waste Management Facility Phytoremediation Operations Plot



The **Waste Management Committee** hosted a tour on Thursday, March 6. CAB members and guests visited

- Solid Waste Division's Treatment Storage and Disposal Facilities
- High Level Waste's Defense Waste Processing Facility, Glass Waste Storage Building and the Tank Farms

In February, **SRS CAB Chair and support staff** toured the Nevada Test Site and Yucca Mountain.



SRS CAB Mission Statement

The SRS Citizens Advisory Board (CAB) is a non-partisan group of individuals who are independent of federal, state and local government organizations as they relate to the mission of the CAB. The Board provides informed and timely recommendations to the U.S. Department of Energy (DOE), and the Environmental Protection Agency-Region IV (EPA), and the South Carolina Department of Health and Environmental Control (SCDHEC) concerning decisions that affect SRS in areas of environmental restoration, waste management and activities related to these functions. Two important goals of the Board are to improve two-way communication with SRS impacted communities and to ensure that stakeholders are given an opportunity to become involved in the decision-making processes of DOE, EPA, SCDHEC, and SRS management.

Members in the Spotlight



David Adcock

David is Professor and Chairman of the Department of Radiology at the University of South Carolina School of Medicine. He is board certified in the specialties of Occupational Medicine, Preventive Medicine and Public Health, Radiology and Nuclear Medicine. David serves as the Chief Medical Consultant for the SC Workers Compensation Commission and the Adjunct Professor of Health Administration for the USC School of Public Health. He lives in Batesburg, SC.



Meryl Alalof

Meryl's educational career spans 27 years from various English teaching positions to high school principal. Throughout her 40 years in the Augusta, GA area, Meryl has been very active in state and community affairs. She has served on the boards of many children foundations and recently served an 8-year term as a Governor appointee on the Judicial Nominating Commission for the State of Georgia. Meryl holds Master of Education and Education Specialist degrees from Augusta College. Recently retired, she resides in Martinez, GA.



Walter Becker

Walter was an employee of Brookhaven National Laboratory for 41 years where he participated in numerous projects including laboratory studies of methods of immobilizing radioactive and hazardous waste; the retrieval, characterization and testing of radioactive waste forms disposed in the sub-sea environment for EPA/ and testing and evaluation of waste forms for the Nuclear Regulatory Commission. Walter recently retired to Hilton Head Island, SC.



Nancy Ann Ciehanski

Nancy Ann has resided on Hilton Head Island, SC, for 22 years. She served as Mayor pro tem of Hilton Head during its formative years and was a past president of the League of Women Voters. She served on the Board of Directors of Hilton Head Public Service District I and held a long tenure on the HHI Planning Commission. In addition to other affiliations, Nancy Ann is

presently a member of the Beaufort County Planning Commission and the SC Advocates for Women on Boards and Commissions.



Gerald Devitt

Gerald served as Chief Industrial Hygienist for Owens Corning Fiberglass from 1970 until retirement where he instituted, organized and administered a comprehensive Industrial Hygiene program for this major manufacturer. He is a Certified Safety Professional and also serves as a part-time and guest lecturer on a variety of industrial hygiene topics. He also serves on the Center for Disease Control Health Effects Subcommittee.



Vera Barnes Jordan

Vera recently retired with 30 years of service from Bell South Communications where she worked as a long distance, local and overseas operator. She also completed various math and computer courses during her telecommunications career. She is very active in church and community activities. Vera lives in Augusta, GA.



J.G. Long

J.G. works for the Internal Oversight Division of Westinghouse Savannah River Company at SRS. He holds a BA in Business Administration and an MBA in Marketing and Finance. He is a certified mediator and arbitrator. J.G. is active in his community church and serves on a local elementary school counsel advisory committee. His home is Martinez, GA.



Heather Lea Simmons

Heather is the County Administrator for Allendale County, SC. She serves on several boards including the Chamber of Commerce, Tri-County Alliance and Allendale Alive. She has worked in economic development as well as county administration and is a member of the Kettering Foundation where she serves on the Community Political Deliberations Board. Heather resides in Allendale, SC.

Dynamic Underground Stripping in M-Area

Dynamic Underground Stripping (DUS) has removed over 18,000 lbs. of volatile organic compounds in M-Area since mid-September 2000. DUS is a cleanup technique where injected heat (steam) mobilizes contaminants for recovery and destroys them in-situ or in-place. It is applicable to a broad range of contaminants, including dense non-aqueous phase liquids and fuels. Chlorinated solvents discharged into A/M area soils totaled approximately 3.5 million pounds. A phased remediation program has been ongoing since 1985 and over 900,000 lbs. of solvents have been extracted from the subsurface. DUS is being applied to a specific area of contamination known as the 321-M Solvent Storage Tank Area where dense non-aqueous phased liquids are located. This will help reduce the effort and schedule of traditional remediation methods in the A/M Area. The process recently met its third and final success



Vapor heat exchanger

Steam injection pipes



criteria by reaching the required boiling point throughout the entire soil block on March 7. This means that only intermittent steaming is necessary for mass removal of contaminants. ■

SRS CAB Approves Work Plan

The CAB approved the latest Annual Work Plan at their February Combined Committee meeting held in Augusta, GA. The Plan is based on input provided by Committee members at working sessions prior to the January Board meeting in Hilton Head, SC. That input was further refined

by the Chairs of the individual committees prior to approval of the full Board.

Although there are a wide variety of issues of interest to the CAB, there are limits to the available time and resources. The purpose of the Work Plan is to establish priority issues for each of the Committees, and therefore the CAB. It allows all Board members to be involved in setting the direction of the CAB, prioritizing resource expenditures (people and dollars), and controlling the activities of focus and working groups.

The Work Plan contains sections for each of the four issues-based Committees of the CAB. Each Committee identifies priority areas and other areas of consideration. Committee chairs structure their activities to focus first on the high-priority items, and then on the other items. Since new issues may come up during the year, deviating from the Work Plan is at the discretion of the Committee Chairs. However, they inform the CAB when this is required.

Priority issues identified by the CAB in this latest version of the Plan include Stewardship, the Consolidated Incineration Facility, the Old Radioactive Waste Burial Ground, and the Canyon Utilization Plan. The Work Plan is reviewed and updated every six months and can be viewed on the CAB website at www.srs.gov/general/people/srs-cab. ■

Members of the SRS Citizens Advisory Board are available at your convenience to provide

- a brief history of SRS,
- a description of the various environmental management programs, and
- information about how the public can get more involved in important cleanup decisions

Is Your Organization Looking for Interesting Speakers?

Please call 1-800-249-8155 for more information



Upcoming 2001 Board Meetings

May 22 (Combined)	Holiday Inn Midtown	Savannah, GA
July 23-24 (Full)	Holiday Inn Coliseum at USC	Columbia, SC
August 28 (Combined)	SC Advanced Technology Park at Snelling	Barnwell, SC
October 22-23 (Full)	Sheraton Augusta Hotel	Augusta, GA
November 13 (Combined)	Embassy Suites	N. Charleston, SC

NOTE: Individual committee meetings will be held as required.



Key criteria for Board membership includes a time commitment, and the desire and ability to work towards better and informed recommendations. To apply for membership to the Citizens Advisory Board, please call 1-800-249-8155.

Mailing List

Name _____
 Address _____
 City _____
 State _____ Zip _____
 email Address _____

- Add my name to mail list
- Remove my name from mail list
- Correct my address

Mail to:

Savannah River Site
 Citizens Advisory Board
 Building 742-A, Room 190
 Aiken, SC 29808

"Board Beat" is published semiannually by the Savannah River Site Citizens Advisory Board. Content is provided by Board members and support staff. Please send your comments and suggestions to:

Dawn Haygood
 SRS Citizens Advisory Board
 Building 742-A, Room 190
 Aiken, S.C.
 Phone: 1-800-249-8155
 Fax: (803)725-8057
 e-mail: dawn.haygood@srs.gov

Savannah River Site
Citizens Advisory Board
 Building 742-A, Room 190
 Aiken, SC 29808