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FCAB UPDATE

Week of December 21, 1998

(Last Briefing was Dated December 7, 1998)

MEETINGS

FERNALD MONTHLY PROGRESS BRIEFING Services Building Conference Room
Tuesday, January 12, 1999 • 6:30 pm

ON-SITE COMMITTEE Administration Building First Floor
Thursday, January 14, 1999 • 6:30 pm

OFF-SITE COMMITTEE Administration Building First Floor
Wednesday, January 13, 1999 • 6:15 pm

EFFICIENCY COMMITTEE Administration Building First Floor
Thursday, January 13, 1999 • 6:30 pm

FULL CAB MEETING Large Lab Conference Room
Saturday, January 16, 1999 • 8:30 pm

ATTACHMENTS

- 11/11/98 On-Site Committee Meeting Summary
- 12/10/98 Efficiency Committee Meeting Summary
- Questions and Answers, Efficiency Committee/Fernald Citizens Advisory Board
- Fernald Health Effects Subcommittee
- Excerpt from Savannah River's meetings concerning intermodal transportation
- Savannah River Site Citizens Advisory Board's letter to Mr. Greg Rudy, manager of the U.S. DOE Savannah River Operations Office
- Savannah River Site Citizens Advisory Board's letter to Mr. Dale Schutte, Chair of Nevada Test Site Citizens Advisory Board

NEWS and ANNOUNCEMENTS

Happy Holidays!

FOR FURTHER INFORMATION

Please contact Doug Sarno or Gwen Doddy, Phoenix-Environmental Corporation
Phone: 513-648-6478 or 703-971-0058 Fax: 513-648-3629 or 703-971-0006
E-Mail: DJSarno@aol.com

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Topics:

- Fernald Living History Project Presentation by Steve Depoe
- Details of Future Land Use Options

Attendees:

CAB members:	Jim Bierer Pam Dunn Ken Moore Doug Sarno Bob Tabor
Cincinnati Enquirer:	Rachel Melcer
FRESH members:	Carol Schroer Edwa Yocum
Ohio EPA:	Laura Hafer
University of Cincinnati:	Steve Depoe

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Action Items:

- Create a long-term vision for land use integrating the Native American groups, natural resources, and the Living History Project.
- Ask DOE for an overview of the site's historical preservation procedures.
- The Site needs to provide a warehouse for the artifacts.

Meeting Summary:

Fernald Living History Project Presentation

Steve Depoe, from the University of Cincinnati and a member of the Fernald Living History Volunteer Advisory Group, gave a presentation on the Fernald Living History Project (FLHP). Since October 1997, the FLHP Volunteer Advisory Group has met monthly to design the structure of the organization, goals of the project, and funding alternatives. They are working in partnership with the University of Cincinnati and Miami University, site officials, and regulators. The FLHP has written grant proposals to several different organizations, including Ohio EPA's Environmental Education Fund and Seansgood Government Foundation. Moreover, the group is trying to raise awareness about their work by the hosting information booths at area events. From these community outreach activities, the group has gathered approximately 200 names of people who are interested in the FLHP.

In addition, they are in the process of forming a community-based nonprofit organization called Fernald Living History, Inc. which should be established by early 1999. The new community-based organization will assume more responsibility for the outreach and grantsmanship activities. The organization plans to interview former and current employees of Fernald, former and current residents of the Fernald area, and the original members of the FCAB. With these interviews, the FLHP will compile educational videos and create a video library. These videos may emphasize different aspects of the history of Fernald. For example, one video may focus on the history of the Cold War (for use in a Social Studies class), and another video may focus on the use of land over the decades (for use in a Earth Science class).

The Committee viewed a video created by the FLHP.

After the screening, the Committee asked Steve what type of support FLHP wanted from the FCAB. FLHP would like the FCAB to help with funding, community outreach/ education, and ultimately generate proposal for a museum for historical artifacts at the Fernald Site. The Committee will ask the full CAB to support the efforts of the FLHP.

Details of Future Land Use Options

The Committee wants to develop a long-term vision integrating the Native American groups, natural resources, and the Living History Project. A Museum and Cultural Center located on the 23 acres would reflect the FCAB's vision of creating a site of national significance and would compliment a nature preserve. In order to create this museum, the FCAB would need to implement historical preservation procedures and find storage space for the artifacts. The Committee is concerned that materials may be destroyed without knowledge of their historical significance, therefore, the Committee will ask, at the Saturday full CAB meeting, the DOE what, if any, historical preservation procedures are in place.



**FERNALD
CITIZENS
ADVISORY
BOARD**

On-Site Committee Meeting Summary

November 11, 1998

page 2 of 2

Topics:

- Current Budget Activities
- Defense Facilities Closure Projects Update
- Year 2000 Plans

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Attendees:

CAB members:	Lisa Crawford Pam Dunn Doug Sarno Bob Tabor
Fluor Daniel Fernald:	Tisha Patton
OEPA:	Jim Coon
USEPA:	Gene Jablonowski

Meeting Summary:

Current Budget Activities

DOE-Fernald responded to a series of questions concerning the budget, Defense Closure Fund, and year 2000 plan. Jack Craig, from the DOE-Fernald, presented the responses. One question was how much money did the FEMP request in the FY 1999 budget and how much did they receive. Craig responded the FEMP requested \$275,347 and received \$277,110; this was the first time the FEMP received more money than requested. The extra money is designated for technology demonstrations and year 2000 upgrades, which the FEMP would have paid for out of their operations budget. Because the baseline does not include money for special nuclear materials, Pam Dunn wondered where they would fall in the budget. Craig stated they are unsure of the costs to ship the materials to Oak Ridge, and it is not yet budgeted. When shipment is ready to begin, the lowest priority items, for example D & D, will be delayed and the money designated for them will be used for the removal of nuclear materials. The FEMP has requested a budget increases for the removal, however, there are no additional funds available.

The Ohio Field Office and its sites are currently working on finalizing the FY2000 submittal to Congress which is due in February and developing the FY2001 budget based on OMB guidance. The target budget for FY2000 is \$280,589.

Defense Closure Fund

Craig also answered the question regarding the Defense Closure Fund. In 1998, Congress designated Fernald and Rocky Flats as closure sites. In FY1999, the ODOE asked Congress to include all Ohio sites in the Defense Closure Fund, Congress agreed to include the Ohio sites with the except of West Valley, because it is a non-defense site. As a result of the Defense Closure Fund, the Congress will not delete any funds from the ODOE's budget, moreover, the ODOE Field Office will perform fewer budget exercises than the rest of the DOE field offices.

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Year 2000 Plan

The DOE identified three systems at the site as "mission critical systems". These systems are required to be Year 2000 compliant by March 31, 1999. Craig stated that they are ahead of schedule. The systems identified as "mission sensitive" will be compliant by March 31, 1999, which is six months ahead of the schedule.

Bob Tabor asked Craig when the DOE thought the nuclear material would be shipped to Oak Ridge, and how could the DOE determine the budget for the shipping. In March of 1999, the DOE should know what materials are going to be declared waste, sent to Oak Ridge, and the cost of shipment. Oak Ridge would like to accept all materials from Fernald by the end of this fiscal year. It is DOE's intention to have the materials, which are not accepted by Oak Ridge, to be declared as waste and shipped to Nevada Test Site. Fernald has to budget for shipping to Oak Ridge, but is unsure if it also needs to budget for the construction of on-site facilities at Oak Ridge.



**FERNALD
CITIZENS
ADVISORY
BOARD**

Questions and Answers
Efficiency Committee/Fernald Citizens Advisory Board
December 10, 1998 7:30 p.m.

BUDGET

Q. "Exactly what did we get in the latest budget round, and is it what we asked for?"

A. The FY1999 budget request for the FEMP was \$275,347, and the latest budget round provided the FEMP \$277,110.

Q. "What FY(s) are we actively working on getting money for at this time?"

A. The Ohio Field Office and its sites are currently working on finalizing the FY2000 submittal to Congress in February and developing the FY2001 budget based on OMB guidance.

Q. "How much per FY are we requesting for the years in the item immediately above?"

A. The target for FY2000 is \$280,589. Also, please see **Attachment 1** for a spreadsheet which provides funding requirements for FY1999 through FY2008.

DEFENSE CLOSURE FUND

Q. "All the OH sites really are in the Defense Closure Fund now; when and how did this happen?"

A. In summary, the FY1999 Congressional Budget Request placed individual projects into the appropriate program account (i.e., Site Closure, Site/Project completion, or Post 2006 Completion). The Closure program accounts includes all projects to be completed by 2006 without a continuing DOE mission.

DOE, using the *Accelerating Cleanup: Paths to Closure* strategy, worked with Congress and OMB to establish the current appropriation/account structure for FY1999. The structure contains the Defense Facilities Closure Projects appropriation (which includes defense funded site closure projects), the Site/Project Completion and Post 2006 Completion defense funded accounts in the Defense Environmental Restoration & Waste Management appropriation, and the Site Closure, Site/Project Completion, and Post 2006 Completion accounts in the Non-Defense Environmental Management appropriation. The FY1999 Congressional Budget Request placed individual projects into the applicable appropriations/account (i.e., Site Closure, Site/Project Completion, or Post 2006 Completion). The Defense Facilities Closure Projects appropriation includes all projects to be completed by 2006 without a continuing DOE mission. For Ohio, all of our projects are funded in either the Defense Facilities Closure Projects appropriation or the Non-Defense Environmental Management/Site Closure appropriation/account in FY1999. Fernald and Ashtabula are funded in the Defense Facilities Closure Projects appropriation,

and Miamisburg is predominantly funded in the Defense Facilities Closure Projects appropriation, but does have a small amount of Non-Defense Environmental Management/Site Closure funding. Columbus is predominantly funded in the Non-Defense Environmental Management/Site Closure, but does have a small amount of Defense Facilities Closure Projects funding, and West Valley is funded in the Non-Defense Environmental Management/Site Closure appropriation/account.

Q. "This is a change from what Congress mandated originally; how is the Defense Closure Fund now being handled at HQ?"

A. In FY1998, Fernald and Rocky Flats were the only sites funded in the Defense Facilities Closure Projects appropriation. Through the FY1999 budget process, we were able to include all Ohio sites in the Defense Facilities Closure Projects appropriation and the Non-Defense Environmental Management/Site Closure appropriation/account. As stated in the above response, the Closure appropriations/accounts include projects to be completed by 2006 without a continuing DOE mission. Sites with projects to be completed by 2006 without a continuing DOE mission are budgeted in the appropriate Closure Fund (defense or non-defense). Currently, Headquarters is following the Congressional intent demonstrated in the FY1999 budget process and is supporting the funding of the Closure sites. Headquarters has also designated a Deputy Assistant Secretary (EM-40) as the lead for all the Ohio sites.

Q. "How did the whole Closure Fund concept impact HQ's decision making in the last budget round? What impact might it have in the current round?"

A. A memorandum from Leah Dever, Ohio Field Office Manager, to the Project Office Directors states, "Inclusion in the Closure Appropriation is our best hope of receiving planning level funding and being excluded from appropriation reductions for uncosted balances and other unfunded mandates."

Following the lead set by Congressional action in the FY1999 budget process, Headquarters did not include the Defense Facilities Closure Projects appropriation in any general reductions/unfunded mandates in FY1999. Congress was very specific in excluding the Defense Facilities Closure Projects appropriation from any uncosted balance offset reductions; therefore, Headquarters took this as Congressional intent for other Headquarters-controlled reductions. As for the FY2000 budget and other future budgets, we can only hope that Congressional and Headquarters support of the Closure projects will continue. Their continued support will hopefully be ensured by Ohio's success in demonstrating our progress towards our completion goals.

Q. "Is the Defense Closure Fund now "closed" to addition of any other sites in the complex?"

A. Currently, we are not aware of any other sites in a position to be added to the Defense Facilities Closure Projects appropriation. However, no appropriations are "closed." If another defense-funded site could substantially accelerate its completion schedule so that

completion would occur by 2006 and no continuing DOE mission existed at the site, it would be appropriate to include it in the Defense Facilities Closure Projects appropriation. Headquarter's policy is to determine the applicable appropriation by entire sites, not by individual Project Baseline Summaries (PBSs), so we do not realistically expect other sites to move into the Defense Facilities Closure Projects appropriation. Any movement between appropriations/accounts will also be subject to a formal change control process to be established by Headquarters.

YEAR 2000 PLAN

- Q.** "At the last full FCAB meeting (11/14/98), the Y2K Plan was mentioned. The Efficiency Committee would like to see the plan(s) and hear about it (them) briefly."
- A.** Attachment 2 provides a briefing on the Y2K issue, and Attachment 3 includes the Year 2000 Readiness Plan.

OTHER ATTACHMENTS INCLUDE:

- Attachment 4** **FEMP List of PBSs (Including Crosswalk from ADSs)**
- Attachment 5** **FEMP Baseline Work Breakdown Structure**



Fernald Health Effects Subcommittee

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Fernald Health Effects Subcommittee

Citizens working with CDC and ATSDR to determine if historic releases from the former Fernald Feed Materials Processing Center adversely affected the health of workers and communities surrounding the plant.

December 1998

**NOW AVAILABLE: THE FINAL VERSION OF CDC'S REPORT,
"ESTIMATION OF THE IMPACT OF THE FORMER FEED MATERIALS PRODUCTION
CENTER (FMPC) ON LUNG CANCER MORTALITY IN THE SURROUNDING
COMMUNITY"**

After undergoing over 6 months of public and scientific review, CDC has finalized its draft report, "Estimation of the Impact of the Former Feed Materials Production Center (FMPC) on Lung Cancer Mortality in the Surrounding Community." [This report was initially released during the FHES' March 1998 Quarterly Meeting where the FHES and community members were the first to hear the initial results from this project.]

The main results contained in the final version of this report remain the same as those first reported to the public in March 1998. The changes in the final report mostly result from public comment requesting more information on 2 issues: 1) doses received by people who were born, or who first moved into the assessment domain, after 1979 and 2) the percentage increase in the number of estimated lung cancer deaths that may be due to FMPC-related radiation exposure outside the 10 kilometer assessment domain.

The report explains that due to containment measures applied to the K-65 silos in 1979, the amount of radon and radon decay products released from the site was greatly reduced from 1980 onward. Results of this additional research indicate that almost all of the increase in the number of lung cancer deaths that may be related to FMPC exposures occurred among residents first exposed before 1980.

The issue of potentially elevated lung cancer mortality at distances beyond the current domain was discussed by the Fernald Health Effects Subcommittee in their review of the draft report. The subcommittee requested that CDC researchers develop estimates for areas outside the existing assessment domain simply by extending the trend found in the FMPC-related percentage increases estimated within the domain. CDC provided these rough estimates to Subcommittee members in their August 1998 meeting. These additional

estimates were also reported in the *Cincinnati Enquirer* following that meeting. Like the estimates for the populations who resided within the assessment domain, these estimates are for people who lived in the area for some period of time from 1951 through 1988. They provide rough approximations of the percentage increase in lung cancer deaths that may occur in this group from 1951 through 2088. Estimates to the northeast of the site range from a 0.6% increase at 15 kilometers (approximately 9 miles) to a 0.04% at a distance of 30 kilometers (approximately 19

FHES MEMBERS TO MEET MEMBERS FROM OTHER HEALTH EFFECTS SUBCOMMITTEES

This December 1998 marks the first time ever that members from all of CDC and ATSDR's site specific health effects subcommittees will have a chance to meet and learn from each others experiences. The four health effects subcommittees focus on the DOE sites of Hanford, Idaho National Engineering and Environmental Laboratory, the Savannah River Site, and Fernald. The four will meet concurrently in Salt Lake City, Utah on December 8 - 10.

miles). (This means that, if 100 hypothetical persons lived at a distance of 15 kilometers from the site for some period of time from 1951 through 1988, CDC estimates that 0.6, or approximately one, additional lung cancer death may occur among this hypothetical group sometime between 1951 and 2088 due to radiation exposure from the FMPC site.) The estimates of the median percentage increase in the number of lung cancer deaths due to FMPC radiation exposure to the southeast of the site range from a 2% increase at 15 kilometers to a 0.3% increase at a distance of 30 kilometers. To the west of the site, however, the estimated percentage increases in the number of lung cancer deaths are 0.5% or lower for all distances beyond the current assessment domain. It is important to remember that the uncertainty associated with the estimated percentage increase in the number of FMPC-related lung cancer deaths among citizens who resided within the assessment domain was quite large. Because the estimates of the percentage increase in lung cancer deaths beyond the assessment domain are based on the uncertain estimates within the assessment area, these estimates are also highly uncertain.

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To receive a copy of the final report and the fact sheets summarizing the background and full results of the research, send this form to: CDC NCEH, 4770 Buford Highway, NE, Atlanta, GA 30341-3714 [Attn: Steve Adams and/or Sharona Woodley]. Materials may take 2-4 weeks for delivery

Name: _____

Mailing Address: _____

**OTHER FERNALD CITIZEN
GROUPS AND
ENVIRONMENTAL CLEANUP
INFORMATION SOURCES**

FRESH, INC.
(Fernald Residents for Environmental Safety
& Health)
c/o Lisa Crawford, President
P.O. Box 129
Ross, OH 45061-0129
513-738-8055

**FERNALD COMMUNITY REUSE
ORGANIZATION (CRO)**
P.O. Box 38
Ross, OH 45061
Phone: 513-648-4168
Julie_Loerch@fernal.gov

**FERNALD CITIZENS ADVISORY
BOARD**
c/o John Applegate, Chair
University of Cincinnati
Room 415 - College of Law
Cincinnati, OH 45221-0040
513-648-6478
Swalpole@fernal.gov

**FERNALD ENVIRONMENTAL
MANAGEMENT PROJECT (FEMP)**
Fernald Community Message Line
513-648-6272 or
Gary Stegner - 513-648-3153
http://WWW.fernal.gov

**THE FEMP PUBLIC ENVIRONMENTAL
INFORMATION CENTER (PEIC)**
Delta Building, 10995
Hamilton-Cleves Highway

**FERNALD
FACTS**

Official Name: The Citizens' Advisory Committee on Public Health Service Activities and Research at Department of Energy (DOE) Sites, Fernald Health Effects Subcommittee (FHES).

Established: Spring 1996

Purpose: To provide community-based advice and recommendations to the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) concerning the agencies' public health activities at the former FMPC.

Authority: Authorized through 42 U.S. Code 217a, Section 222 of the Public Health Service Act, as amended. FHES is governed by the provisions of Public Law 92-463, the Federal Advisory Committee Act (FACA), as amended (5 U.S. Code App. 2), which sets forth standards for the formation and use of advisory committees.

Structure: FHES is comprised of the members listed below. One half of the membership serves 2 year terms; the remaining membership serves from 2 to 4 years. Members were selected based upon their knowledge of the community and labor concerns and their ability to offer diverse community viewpoints and interests. Members are representative of the community affected by the Fernald Site. Key governmental liaisons include ATSDR, CDC's National Institute of Occupational Safety and Health (CDC NIOSH), the U.S. Environmental Protection Agency (U.S.EPA) and the state of Ohio health and environmental departments. CDC is the agency which has lead responsibility for FHES activities at DOE's Fernald Site. Management and support services for the FHES are provided by the CDC's National Center for Environmental Health (CDC NCEH).

Meetings: Meetings are held approximately 4 times per year in the Fernald area. Meetings are open to the public.

Chair
Joseph B. Farrell, Ph.D.
Environmental Consultant
1117 Stormy Way
Cincinnati, Ohio 45230-3625

Executive Secretary
Steven A. Adams
Public Health Advisor
Centers for Disease Control & Prevention
National Center for Environmental Health
4770 Buford Highway, NE
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Members:
Gene Branham
Vice President, Fernald Atomic Trades Council
137 Fairway Drive
Hamilton, Ohio 45013

Robert E. Burgin
Senior Regulatory Compliance Consultant/Alpha & Omega Svcs.
12025 Merganster Drive
Cincinnati, Ohio 45246

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Greater Cincinnati Building Trades Representative at Fernald
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Fernald, Ohio 45013-9402

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Obstetrics & Gynecology
Crescent Women's Medical Group
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**Liaison
Representatives**

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Ohio EPA
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

Jim Colleli
Ohio Department of Health
Bureau of Radiation Protection
246 North High Street
Columbus, Ohio 43226

Christopher Eddy
Director, Environmental Health
Hamilton County General Health District
Chester Towers, Suite 1500
11499 Chester Road
Cincinnati, Ohio 45246

Thomas M. Ontko
Ohio EPA
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402



Visit CDC's Web Site at: <http://www.cdc.gov>

Visit the CDC NCEH Web Site at:
<http://www.cdc.gov/nceh/ncehome.htm>

Visit CDC NIOSH's Web Site at:
<http://www.cdc.gov/niosh/homepage.html>

Visit ATSDR's Web Site at:
<http://atsdr1.atsdr.cdc.gov:8080/atsdrhome.html>

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ATTN: Off-Site Committee Members

These two excerpts are from the SRS Citizens Advisory Board's Environmental Remediation and Waste Management Subcommittee Summary (the date of the meeting is noted)

Meeting Record, November 10, 1998

Bill Lawless introduced the discussion on the Intermodal Transportation issue. He indicated that in lieu of a motion at this time, a letter of support would be more appropriate. Bill Noll indicated that Nevada is the strongest proponent of Intermodal Transportation because they would be the recipients of the waste and want to assure safer control over travel routes passing over Hoover Dam and through the city of Las Vegas, Nevada.

November 16, 1998

The next draft to be discussed was Intermodal Transportation. Instead of a full draft motion, Bill Lawless suggested to the subcommittee that a letter of support from the SRS CAB be provided to the Nevada Test Site Community Advisory Board (NTSCAB). Bill Noll talked briefly about the proposed action of DOE -Nevada, which is to encourage approved low-level radioactive waste generators and their transportation contractors to use transportation alternatives that would further minimize radioactive risk and enhance safety. Copies of the letter approved by the NTSCAB and sent to Mr. Carl Gertz, DOE Assistant Manager of the Nevada Operations Office was distributed as well as the draft letter prepared by the SRS CAB ER&WM Subcommittee. The SRS letter focused on the national picture of the transportation plans for all of DOE's wastes not just LLW and how will transporting other wastes and LLW impact NTS, STS, and the complex as a whole.

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Savannah River Site

CITIZENS ADVISORY BOARD

A U.S. Department of Energy Site-Specific Advisory Board

Chairperson

Ann Loadholt
P.O. Box 365
Barnwell, SC 29812

Vice Chairperson

Brendolyn Jenkins
P.O. Box 228
Elko, SC 29826

Members

William Adams
Arthur Belge
Thomas Costikyan
Bill Donaldson
Mary Elmer
Ken Goad
Bill Lawless
Jimmy Mackey
Kathryn May
Barbara Murphy
Lane Parker
Karen Patterson
Maria Rejchmanis
Lola Richardson
Perretta K. Smith
Ed Tant
Wade Waters
Beaune Wilkins
Rebecca Witter

Ex-Officio Members

DOE
Tom Heenan
Frank McCov

EPA
Julie Corkran
Jeff Crane

SCDHEC
Ann Clark
Myra Reece

November 19, 1998

Mr. Greg Rudy, Manager
U.S. Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, S.C. 29808

Dear Mr. Rudy:

On behalf of the SRS CAB, I am pleased to forward you five recommendations adopted at our November 16-17, 1998, meeting held in Columbia, S.C. Recommendation 69 addresses selection of salt disposition alternatives and Recommendation 70 is a request for a new risk-based priority list. Recommendation 71 asks for dedicated support to a focus group review regarding closure of the Old Radioactive Waste Burial Ground. Recommendation 72 addresses disposal of low level wastes and mixed low level wastes and our comments regarding this Record of Decision of the Waste Management Programmatic Environmental Impact Statement. Our fifth recommendation urges DOE to give its most careful consideration to the National Academy of Science Study regarding spent fuel treatment options.

All enclosures are also being forwarded to John Hankinson of the Environmental Protection Agency and Lewis Shaw of the South Carolina Department of Health and Environmental Control. We would appreciate your written response prior to our next meeting on January 26 in Hilton Head, S.C. As always, where appropriate, we trust DOE, EPA and SCDHEC will carefully consider these recommendations and work together to develop a response for implementation.

Sincerely,

Ann Loadholt
Chairperson

cc: Tom Heenan, DOE-SR
Fred Butterfield, EM22
Karol Hazard, EM22
SSAB Chairs

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CITIZENS ADVISORY BOARD

Recommendation 70

November 17, 1998

Risks and Funding

Background:

A review of the FY 2000 budget priority list by the Risk Management and Future Use subcommittee of the SRS Citizens Advisory Board (CAB) continues to reveal that fixing some high risk items, such as stabilization of the Americium and Curium solutions, remain low on the priority list. This is probably due to the consideration of numerous factors when preparing the budget priority list (regulatory compliance, mission viability, cost efficiency, safeguards and security, etc.) in addition to risk to worker and public health and safety. Determining the budget priority list requires a balancing of these numerous factors and the resulting list could easily vary among different people or organizations preparing such a list. It would be desirable to fund all of the items on the budget priority list but that is not likely to happen.

In its critique of past budget rankings, the CAB has consistently emphasized protecting the health and safety of workers, the public, and the environment (see SRS Citizens Advisory Board Recommendation Number 17, 3/26/96). We feel that SRS must focus on those items that pose the highest threat first, then items of low threat subsequently. However, some low risk items continue to be funded before higher risk items.

Recommendation:

The SRS Citizens Advisory Board remains concerned that some projects/actions with low risk take funding precedence over higher risk items with a higher risk to worker safety, human health and the environment. Therefore, we recommend that:

1. Along with the list traditionally prepared under the present budget system, DOE-SR prepare and submit to the SRS Citizens Advisory Board a priority list based strictly on health and safety risks to workers, the public, and the environment.
2. DOE-SR provide to the Board a justification of the differences between the traditional budget list and the ranking of items based strictly on the greatest threat to the health and safety of workers, the public, and the environment.

Savannah River Site

CITIZENS ADVISORY BOARD

Recommendation 69

November 17, 1998

Selection of HLW Salt Disposition Alternatives

Background:

The High Level Waste (HLW) tanks at SRS contain highly radioactive wastes from the chemical processing facilities at SRS. Most of the radioactive nuclides are contained in a sludge at the bottom of the tank and the remaining, mostly Cesium-137, is in the salt solution in the upper part of the tank. The sludge is removed from the tanks and then is incorporated into glass and poured into stainless steel canisters in the Defense Waste Processing Facility (DWPF). The Cesium-137 was to be chemically removed from the salt solution and added to the sludge prior to vitrification in the DWPF. The decontaminated salt solution (the majority of the volume of material in the HLW tanks) is incorporated into cement and disposed in the SRS Saltstone Facility.

The In Tank Precipitation (ITP) process for removing the Cesium-137 from the salt solution has not worked as expected. The operation of ITP has been suspended and SRS has been identifying and evaluating alternatives over the last few months. At the April 27, 1998, Environmental Remediation and Waste Management Subcommittee meeting of the SRS Citizen Advisory Board, a Focus Group was formed to evaluate the process used by SRS to select alternatives for the ITP process and to examine in more detail the final four alternatives. The Focus Group has prepared a report on their review. In summary, the Focus Group was very pleased with the process used to identify a possible 130 alternatives, to select 18 candidates and then to select the top four alternatives. Each stage of the selection process involved increasing amounts of detailed information. For each of the four alternate technologies, the Focus Group identified concerns/observations which have been discussed with the SRS Team.

Recommendations:

The SRS Citizens Advisory Board has reviewed the Stakeholders Report on the review of the replacement process for the ITP process and agrees with its recommendations and observations. The CAB concludes that the process developed and used by the Salt Disposition Team for evaluating the alternatives was well developed, comprehensive and detailed, and that it was fairly and consistently used.

Utilization of this process should lead to a satisfactory selection for the preferred alternative. The CAB supports a dual track approach and continued work on the primary alternative, Small Tank TPB Precipitation - DWPF Vitrification, and on the secondary alternative, Crystalline Silicotitanate Ion Exchange - DWPF Vitrification, until one clearly becomes the preferred alternative.

The CAB commends the work done by the Focus Group.

Reference

Independent Review of WSRC Process for Selection of HLW Salt Disposition Alternatives, Poe, W. Lee, et. al., October 1998.

CITIZENS ADVISORY BOARD

Recommendation 71

November 17, 1998

Closure of the Old Radioactive Waste Burial Ground

Background:

The Old Radioactive Waste Burial Ground (ORWBG) is a 76 acre inactive landfill disposal area for solid low-level radioactive waste and hazardous wastes in E-Area near the center of SRS. The nearby Mixed Waste Management Facility (MWMF), comprising 58 acres, was compacted and capped previously and the rest of the Low Level Radioactive Waste Disposal Facility (LLRWDF) (about 60 acres) is in the final process of compacting and capping. Contaminated groundwater from the ORWBG flows towards and is outcropping into a ditch which feeds Four Mile Creek. Contaminated groundwater from the LLRWDF flows toward Upper Three Runs Creek but has not outcropped into the creek yet.

The ORWBG was used from 1952 until 1974 and contains waste from SRS, other DOE sites and from Department of Defense operations. Most Low-Level Waste (LLW) was placed in earthen trenches 20 feet wide, 20 feet deep and up to 700 feet long. Generally four feet of dirt was placed on top of the waste. The ORWBG contains about 7,125,000 cubic feet of waste. Approximately 90 percent is job control waste (paper, coveralls, protective clothing, cardboard boxes, etc.). Irradiated metal scrap makes up about 7 percent and the remaining 3 percent is a wide variety of natural and man made radioactive materials, contaminated equipment and absorbed solvents and oils.

An Interim Action was taken under CERCLA for the ORWBG. A low permeability soil cover was installed to further reduce worker risk, reduce contaminant migration to groundwater, reduce potential soil erosion and spread of contaminants, and to stabilize the surface of the ORWBG. This cover is from two to eight feet deep and is sloped to promote stormwater runoff. It was completed for a cost of about \$8 million in February 1998.

The Citizens Advisory Board (CAB) commended the Department of Energy Savannah River Site, the Environmental Protection Agency (EPA), and the South Carolina Department of Health and Environmental Control (SCDHEC) for their consensus Interim Action in CAB Recommendation Number 19, and recommended if feasible, that DOE should select a final remedy that utilizes the soil cover in the Interim Action preferred alternative.

The ORWBG is currently following the CERCLA process for final remediation. A Corrective Measures Study/Feasibility Study (CMS/FS) is scheduled for submittal to the U. S. EPA and to the SCDHEC in March 1999 and for approval in August 1999. A Proposed Plan (PP) is scheduled for submittal in summer 1999 and approval in December 1999, a public comment period from January - February, 2000, a final ROD in June 2000, and starting remedial action in September 2001. The contaminated groundwater is being handled under the Resource Conservation and Recovery

Recommendation:

The SRS Citizens Advisory Board is forming a public Focus Group to evaluate and recommend means of speeding up the schedule and to evaluate and recommend remediation alternatives for closure of the 76 acre Old Radioactive Waste Burial Ground. It is recognized that the ORWBG can not be discussed in isolation without considering the impacts on the groundwater and future impacts on the groundwater of closure alternatives. Therefore, the public Focus Group will also consider the groundwater contaminated plumes. The public Focus Group will be formed by December 1998, report progress to the CAB in May 1999, prepare a report for the CAB by September 1999, and assist the CAB ER&WM subcommittee to draft motions for the CAB consideration as appropriate. It will periodically meet to review the progress toward remediation and report to the CAB as appropriate until remediation actually begins.

1. The SRS Citizens Advisory Board recommends that SRS, EPA and DHEC provide dedicated representatives and technical support to the public Focus Group to ensure its effectiveness.
2. The SRS Citizens Advisory Board recommends that the public Focus Group and the three agencies work together in reviewing alternatives and selecting the preferred remedies for closing the ORWBG.

CITIZENS ADVISORY BOARD

Recommendation 72

November 17, 1998

Waste Management Programmatic Environmental Impact Statement

Background:

A Waste Management Programmatic Environmental Impact Statement (WM PEIS)¹ was prepared by DOE Headquarters to help DOE decide on disposal of Low-Level Waste (LLW), Mixed Low-Level Waste (MLLW), and other DOE wastes. Six candidate sites (Hanford, Idaho, Los Alamos, Nevada Test Site, Oak Ridge and Savannah River Site) have the capability to dispose of existing and projected LLW to be generated for the next 20 years. Hanford, the Nevada Test Site and SRS are being considered for disposal of MLLW. DOE is reviewing the alternatives analyzed in the WM PEIS using the criteria of: mission compatibility; existing site capabilities; minimizing environmental, health, safety, and transportation impacts; reducing costs, and ensuring regulatory compliance. Input from states, tribes and other stakeholders is being sought. The preferred alternative is to be published in the Federal Register in December 1998 or early January 1999 with a Record of Decision published 30 days later. It is recognized that implementation will be preceded by further interactions with states and regulatory agencies.

On August 17, 1998, representatives from the DOE Site Specific Advisory Boards (SSAB) met in Las Vegas, NV. The options in the WM PEIS were discussed and Brendolyn Jenkins, representing the SRS CAB, suggested that a useful method of getting input from the various SSABs would be to have each SSAB rank order the options. This suggestion was accepted. To be useful to DOE in selecting preferred alternatives, input from SSABs needs to be provided by November 30, 1998.

DOE evaluated six options for disposal of LLW in the WM PEIS. They ranged from four sites disposing of their own LLW and one site taking offsite waste to three sites disposing of their own LLW and two sites taking offsite waste. There were advantages and disadvantages of the different combinations. Disposal at commercial LLW disposal sites was not considered as it is prohibited by DOE policy (DOE Order 5820.2A)².

Five options were evaluated for disposal of MLLW. They involved different combinations of MLLW going to the Nevada Test Site, Hanford, and SRS. One option had MLLW going to SRS. However, SRS can not dispose of MLLW as SRS does not have the facilities. Disposal of MLLW is also prohibited by SCDHEC because SCDHEC siting criteria cannot be met.

The SRS CAB used the following criteria in developing their recommendations on options:

- Costs - minimize
- Fatalities (worker and transportation) - minimize transportation fatalities
- Mission Continuity - maintain two disposal sites
- Groundwater Protection
- Equity - for some waste to come into a state some waste should leave (not necessarily the same kind)

The SRS CAB could have taken a parochial view of just managing SRS's own LLW and MLLW. However, we did not. As mentioned previously SRS can not have a MLLW disposal facility. SRS also has Special Case LLW which does not meet the Waste Acceptance Criteria for the SRS LLW Disposal Facility. This waste will have to go elsewhere. The SRS CAB supports the efforts by DOE to optimize waste disposal across the DOE complex and believes that the country and the states need to view this issue from a national perspective instead of a parochial one.

In developing the following recommendations we used data contained in the information package prepared by DOE Headquarters.³

Recommendations:

The SRS CAB wants to be very clear that it will not support regional disposal of DOE wastes if other states prohibit regional disposal. If DOE does not guarantee that some wastes (i.e., MLLW and Special Case Low-Level Waste) will leave SRS, then the SRS CAB cannot support accepting more LLW.

The SRS Citizens Advisory Board makes the following recommendations:

- (1) If DOE selects SRS as the East Coast regional disposal site, the SRS CAB will support this BUT ONLY IF the actions in (5) below are accomplished. Option 3 has SRS taking care of its own LLW and that from DOE sites east of the Mississippi River (the traditional sites of Ames, IA; Argonne East, IL; Brookhaven, NY; Portsmouth, OH; Princeton, NJ; West Valley, NY; in addition, Oak Ridge, TN would be added). The volume of LLW from Oak Ridge is a little less than SRS's; and the rest of the eastern sites generate much less than generated by SRS. Building LLW disposal facilities at Oak Ridge is geologically difficult and expensive. Option (3) is the lowest cost option, has the fewest projected traffic fatalities, preserves mission continuity with two sites in different regions of the country, minimizes transportation and is as protective of groundwater as any other option. Option (2) would be preferred by SRS CAB but would increase transportation requirements since both offsite disposal facilities would be in the western U.S. (Hanford and NTS).
- (2) Do not select MLLW Option (C) which involves SRS as SRS cannot dispose of MLLW. We suggest Option (B) for Mixed Low-Level Waste. Option B has Hanford and the Nevada Test Site taking care of their own MLLW and each site taking MLLW from others in such amounts that the total MLLW at each of these two sites is about the same. This option is next to the lowest cost option, has the fewest fatalities, preserves mission continuity by using two sites which have permitted facilities, and is as protective of the groundwater as any other option. Although there would be an economic benefit to South Carolina from building and operating Mixed Low-Level Waste disposal facilities at SRS it is not possible under current SCDHEC regulations. In addition, we do not believe it is in the best interest of the US taxpayer to fund new facilities when such facilities already exist elsewhere in DOE.
- (3) None of the options permit SRS to ship SRS LLW offsite. SRS has Special Case Low-Level Waste which does not meet the Waste Acceptance Criteria for the SRS Low-Level Waste Disposal Facility. Offsite disposal may be a necessity for some SRS LLW. The WM PEIS does not directly address this case. Disposal of SRS Special Case Low-Level Waste must clearly be a part of the LLW disposal decision process.

- (4) Clarify groundwater protection criteria in reference (3) below. Specify why any groundwater protection criteria would be violated for waste disposal which meets any site's Waste Acceptance Criteria for that Low-Level Waste Disposal Facility. Based on SRS Performance Assessment and the Composite Analysis results, groundwater criteria would not be exceeded given the current Waste Acceptance Criteria.
- (5) SRS CAB support for the Low-Level Waste Option 3 is predicated upon the following actions occurring:
1. Oak Ridge takes SRS hazardous waste for incineration in the Toxic Substances Control Act (TSCA) incinerator.
 2. SRS Mixed Low-Level Waste is disposed offsite and out of state.
 3. A Site other than SRS takes SRS Special Case Low-Level Waste for disposal.
 4. Adequate funding is provided to SRS and its state regulator to manage and dispose of eastern regional LLW, the bulk of which is the Oak Ridge Low-Level Waste coming to SRS under Option (3).
 5. The equitable disposition of other SRS wastes. (Examples are shipment of Pu-239 and Pu-238 in economically acceptable amounts per package wastes to the Waste Isolation Pilot Plant (WIPP) in New Mexico and the shipment of SRS vitrified High Level Waste to Yucca Mountain Nevada for disposal.)
 6. If DOE and the State of South Carolina reach an agreement on the disposal of eastern regional LLW, the bulk of which is Oak Ridge Low-Level Waste, at SRS, this agreement could include a framework similar to one drafted by the State of Nevada and the Nevada Test Site that allows DOE-SR to share regulatory oversight with the State.
- (6) When DOE communicates its preferred option to the states for LLW and MLLW disposal options prior to the Federal Register notice, the SRS CAB requests the opportunity to provide additional input regarding actions if necessary to ensure equity.

References:

1. Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste, DOE/EIS-0200-F, U. S. Department of Energy, May 1997
2. DOE Order 5820.2A, Radioactive Waste Management and its replacement 435.1
3. Information Package on Pending Low-Level Waste and Mixed Low-Level Waste Disposal Decisions to be made under the Final Waste Management Programmatic Environmental Impact Statement, U. S. Department of Energy, September 1998

CITIZENS ADVISORY BOARD

Recommendation 73
November 17, 1998

National Academy of Sciences Study of Treatment Options

DOE requested the National Academy of Sciences to conduct an independent evaluation of the options being considered for the treatment for disposal of the aluminum clad spent nuclear fuel. In September, members of the CAB were given a review of the Academy's report by its principal investigator, Dr Milton Levenson. The objective of the presentation was to assist the CAB in addressing the forthcoming draft EIS on spent fuel management at SRS. This presentation was extremely interesting and informative. The experience and competence of Dr. Levenson as well as the entire review process were most impressive.

The report was comprehensive in its consideration of the many aspects of the treatment options. Certain observations by the Academy are particularly relevant to the upcoming decision process and are noted below:

1. Proliferation concerns would be adequately addressed if conventional processing were to be directly followed by a dilution step.
2. It is questionable whether NRC will accept direct co-disposal because the waste acceptance criteria for a geologic repository have not been established and will not be for several years.
3. The melt and dilute option is based on well-established technologies and should be expected to be successful on these fuels. However, it has yet to be proved for this specific application.
4. A phased strategy for selecting and implementing treatment options is desirable because of many uncertainties such as the quantity and characteristics of all the fuels destined for SRS.

The SRS CAB recommends that DOE give its most careful consideration to the entire NAS report and the above points in particular during the review process of the upcoming draft EIS.

We also request that DOE provide a detailed explanation regarding its consideration of the NAS findings and report back to the SRS CAB.

Savannah River Site

CITIZENS ADVISORY BOARD

A U.S. Department of Energy Site-Specific Advisory Board

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December 2, 1998

Mr. Dale Schutte, Chair
Nevada Test Site Citizens Advisory Board
4680 Bell Vista Avenue
Pahrump, NV 89041

Dear Mr. Schutte:

Attached for your information is the SRS Citizens Advisory Board ranking of the 17 issues identified at the Low Level Waste Seminar held in August in Las Vegas, NV. We held a special two-hour session in conjunction with our November Board meeting to discuss these issues and the majority of our Board was in attendance at that special session.

The SRS CAB members had difficulty understanding several of the issues and want to be very clear that we do not consider this information thorough enough to develop specific recommendations. We do consider this list a good place to start further discussions. Therefore, we consider our ranking as identifying areas the SRS CAB would be willing to discuss with other boards, which is indicated by our support or support with caveats. But we felt constrained to make choices framed by a list which did not include many of our most important concerns, most notably environmental management integration.

We want to note that these issues have not been discussed in a public setting with other SRS stakeholders and only reflect the opinions of the SRS CAB. Our ER&WM Subcommittee Co-Chair Bill Lawless was particularly concerned that the list may be taken out of context, and if so may dilute or even contradict previous messages our CAB has sent to DOE-Headquarters. Therefore, we have noted that SRS CAB recommendations take precedence over any statements that may be contained within the document.

The SRS CAB is unclear as to the context in which these issues will be transmitted to DOE-HQ. We do not at this time support any of them as written and are opposed to submitting them with a recommendation for further action. Again, we consider them as a way to identify areas for further discussion only. We would appreciate it if the NTS CAB noted our concerns (or included this cover letter) in any transmittal to DOE-Headquarters.

We appreciate the opportunity to participate in the Low Level Waste Seminar and look forward to continuing to work with the Nevada Test Site on these issues. Additionally, we have especially appreciated our interactions with Dennis Bechtel which led to our Board's letter of support for the NTS CAB letter to Carl Gertz, a copy of which has been submitted to your board.

Sincerely,

Ann Loadholt
Chairperson

cc: SSAB Chairs



Suggestions related to Economic Considerations

Suggestion

Supports

Does Not Support

Might be able to support under certain conditions (listed separately)

- 1. DOE needs to provide compensation to those communities which will assume the increased burden of low-level waste disposal) to offset the impacts of their extra burden. X compensation related to mission
- 2. DOE should use life-cycle cost/benefit analysis that provides a complex-wide perspective to make a comprehensive, final decision, after considering all factors (including equity). X
- 3. The cost of disposal of low-level waste should be one of the main criteria in determining where wastes should be sent. X protection of worker/public health/safety and protection of the environment

Suggestions related to Environmental/Safety Considerations

- 1. DOE should improve its definition and characterization of low-level waste by accurately characterizing wastes and relating the definitions to the risks posed by the waste, its waste form and its activity level. DOE should use a graded approach to disposal and monitoring. X
- 2. DOE should improve communication with affected communities and the general public; improve worker safety and emergency response training; and encourage improved communication among DOE sites and between agencies/regulators. X as long as it's understood that "workers" means offsite emergence responders, not site workers.
- 3. DOE should improve the regulatory status of low-level waste by continuing to move towards external regulation, improving the site's permitting status, and verifying comprehensive worker medical monitoring. X
- 4. DOE should do what can be done to minimize and/or treat low-level waste from ongoing/new operations and should implement financial incentives to reduce waste generation. X
 - 1. only if "financial incentives" refers to chargeback system where generating agency pays for disposal
 - 2. check the phrase "do what can be done"

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Suggestions related to Equity, Inter-State, Tribal and Environmental Justice Considerations

Suggestion

Supports

Does Not Support

Not applicable to support under certain conditions (listed separately)

- 1. DOE should follow its own policies and executive orders for implementing its responsibilities with regard to how it interacts with states, tribes, and local governments. SSABs should continually strive to be representative of all the public. X

- 2. DOE should establish a universally acceptable definition for equity (that should include a process for determining how to achieve it and a medium for exchange) through a public involvement process (with a comment response document, etc.) that begins with SSAB input. The SSABs should begin by discussing and presenting a definition (from each of their sites' perspectives). DOE should collect the input and propose an integration of those definitions and take public comment on the product. DOE should then reconvene the SSABs to help determine how to define equity on the national level. X

- 3. DOE should develop a legally binding mechanism for funding its commitments to ensure future funding will be adequate to meet its commitments X

Suggestions related to System-Wide Considerations

- 1. DOE should create a Super CAB, composed of all of the Board chairs and 2 or 3 delegates each. The Super CAB should be controlled by the Boards, but supported by DOE. Meetings of the Super CAB should be focused on issues. Participating SSABs will be responsible for gathering data at the local level as appropriate. The Super CAB could play a major role in improving process and in creating feedback loops. X

- 2. DOE should improve communication between DOE-HQ and field offices by supporting greater exchange of staff between. DOE should complete the transition from defense to environmental restoration by dismantling the existing structure and making a single Assistant Secretary on par with Defense programs that will result in an integrated environmental program (bringing waste management and environmental restoration into one program with integrated management strategies for the two previously-separated waste programs). This new program needs to demonstrate purpose and leadership. DOE should also convene a reinventing government, task force to look at regulations, orders, process, relationships, and budgets to make specific suggestions for enhancing effectiveness. Finally, DOE should maximize the effectiveness of closure funds. X

NOTE: This list was developed to identify areas for further discussion ONLY. SRS CAB recommendations take precedence over any statement contained herein.



Suggestion

Supports

Does Not Support

Might be able to support under certain conditions (listed separately)

- 3. DOE should establish a focus for stewardship within DOE, support a national stakeholder meeting on stewardship, and incorporate stewardship considerations into its decision-making processes.

X

Suggestions Related to Transportation Considerations

- 1. DOE must establish a process to include broad stakeholder participation for complex-wide transportation issues which accomplishes early and meaningful public involvement in the decision-making process.

X

- 2. DOE should establish clearly defined and consistent policies for national transportation operations and methodologies. These policies must include, at a minimum, emergency response, modes and routes, standards and protocol, and social equity and sovereignty considerations.

X

- 3. In order to strengthen the public's trust and confidence regarding transportation issues, DOE must provide education and timely and complete information regarding the benefits, safety, and risk of low-level waste transport.

X

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