

**TESTIMONY OF PAUL M. BERTSCH BEFORE
THE SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT
AND
THE SUBCOMMITTEE ON ENERGY AND THE ENVIRONMENT
OF
THE HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY**

**The Department of Energy's Support for the
Savannah River Ecology Laboratory (SREL), Part II**

August 1, 2007

Room 2318

Rayburn House Office Building

10:00 a.m.

Chairman Miller, Chairman Lampson, Ranking Member Sensenbrenner, Ranking Member Inglis, and subcommittee members: thank you for inviting me to testify on this important and most unfortunate situation. My name is Paul Bertsch and I am a Professor of Environmental and Soil Chemistry at the University of Georgia (UGA) and former Director of the Savannah River Ecology Laboratory (SREL), a research laboratory located on the Savannah River Site (SRS) near Aiken, SC and operated by UGA through a cooperative agreement with the U.S. Department of Energy (DOE). The SRS is a former nuclear materials production and processing facility that now has primary missions in environmental cleanup, including the processing and stabilization of high level radioactive waste, as well as in tritium processing and plutonium disposition.

SREL is the quintessential interdisciplinary research lab founded in 1951 by the late Dr. Eugene Odum, widely regarded as the father of modern ecology. The mission of SREL from the very beginning has been to provide an independent assessment of SRS operations on the environment and the mission is accomplished through a program of research, undergraduate and graduate student training, and environmental education and outreach to the general public. The diversity of scientific backgrounds represented by SREL's research staff is a manifestation of Dr. Odum's vision for the field of ecology, i.e., the discipline of ecology represents the intersection of the physical, biological, earth, and mathematical sciences. As such, SREL is recognized internationally by a range of scientific communities and, thus, looms much larger than its relatively small size in terms of notoriety and scientific impact.

The events leading up to the recent budget crisis represent, in my view, unusual and remarkable actions by DOE managers that have had very unfortunate consequences for SREL and its dedicated employees. The outcome also has very unfortunate consequences for citizens of communities surrounding the SRS and the rapidly growing downriver communities in GA and SC that rely on the Savannah River and the Middendorf aquifer as critical natural resources. The

tremendous community support for SREL that has been manifested in letters and editorials in local newspapers as well as in e-mails and phone calls to elected officials and DOE agency representatives has been both overwhelming and humbling.

I have been asked to provide you with the background and facts, supported by written documents, that led to the current funding crisis; facts that are seemingly in direct conflict with what has appeared in letters from DOE officials to both the I&O and E&E subcommittee chairs and in statements by DOE spokespersons to the media.

The events began in the spring of 2005 as the President's FY 06 budget request to Congress, eliminated all funding for SREL, which at the time was funded through DOE's Office of Science. This happened despite the fact that, in the same budget request, the performance-based budgeting documentation justifying the FY 06 request for the Environmental Remediation Sciences Division (ERSD) in the Office of Science listed SREL studies as two of the seven major accomplishments for FY 04. This represented almost 30% of the performance-based indicators generated by an organization that received less than 7% of ERSD's budget. The response from stakeholders representing a broad cross section of the general public, regulators, community leaders, and elected officials was prompt and forceful, resulting in many front page articles, editorials and letters in support of SREL.

In the ensuing months, I worked with UGA administrators and elected officials from GA and SC as well as DOE and NNSA officials to get funding restored for SREL in FY 06. Following numerous meetings and exchange of documents delineating the role and importance of SREL's work at the SRS that extended for more than two months, a meeting with Ms. Jill Sigal, then the DOE Assistant Secretary for Congressional and Intergovernmental Affairs was arranged. In addition to Ms. Sigal, the May 11, 2005 meeting included staff members from the offices of Senators Chambliss (R-GA), Isakson (R-GA), Graham (R-SC) and DeMint (R-SC); staff from Representatives Norwood (R-GA), Kingston (R-GA), Barrett (R-SC), and Wilson (R-SC); several UGA administrators; representatives from UGA's Government Relations Office, including advocates from the Washington D.C. based McKenna Long Aldridge; Dr. James Decker, Principal Deputy Director of the Office of Science; and me. The meeting began with Mr. Chambliss' chief of staff summarizing the issues relative to the zeroing out of SREL funding in the President's FY 06 budget request and the concern by the joint delegation relative to the negative impacts this action would have on their constituents.

Following this discussion, I spoke about the importance of SREL's work to the SRS cleanup mission, long-term stewardship, end state vision, and support of new missions as well as the impact of SREL's environmental education and outreach programs. I also discussed how the various SRS stakeholders including members of the general public and state and federal regulators relied on SREL for independent information concerning the impacts of SRS operations on the environment. I also spoke about the impact SREL's research had on a number of scientific fields. At the end of this discussion, Ms. Sigal asked me about SREL's contracts and grants from other agencies, private foundations, and industry. I spoke about the large increase in funding from outside sources SREL had experienced over the past several years and to our plans to increase this funding in the future. Ms. Sigal then asked me to describe a funding portfolio for SREL if it were to survive the budget crisis. I indicated that I believed that DOE-SR would fund \$2.0-3.5 M a year in projects, a point that Ms. Sigal challenged, suggesting that she did not think the SRS valued SREL's work. I respectfully disagreed with Ms. Sigal and spoke to my more than 20 years experience working on the SRS in partnership with DOE program and contractor personnel and to the unique capabilities SREL provided in support of SRS programs and

activities as well as the role SREL had in the overall public support of the SRS. I was then asked if Ms. Sigal could speak with anyone in DOE familiar with the SRS that clarify this issue. I suggested that Charles Anderson, formerly from the SRS and now at DOE-HQ would be a good individual to speak with regarding SREL and its role on the SRS. Ms. Sigal suggested that she would be meeting with Mr. Anderson that week and would discuss the issue with him. I then described SREL's ongoing successful efforts at expanding funding from other agencies, private foundations, and corporations and how, based on encouragement from DOE program managers at the SRS and in the Office of Science, this funding was leveraged with the DOE funds to maintain a viable and vibrant research lab despite many years of reduced and then flat funding from DOE. I also described the need for funding SREL infrastructure given that SREL was responsible for maintenance and upkeep of more than 100,000 square feet of office and sophisticated laboratory space in three different locations on the SRS. Ms. Sigal questioned DOE's responsibility for infrastructure support at which time I engaged Dr. Decker in the conversation, believing that, given his experience with facility support by the Office of Science, he would understand my position. Dr. Decker agreed that a responsible landlord and steward was a requirement for keeping sophisticated laboratories vibrant and at the cutting-edge of science.

Ms. Sigal then asked me to articulate this funding portfolio in a two page document and deliver it to her by COB the following day. I generated this document which specifically identified sources of funding for SREL, including \$2.0 to \$3.5 M in project funds from the SRS and \$2 M in infrastructure support from EM and NNSA, in addition to \$2-3 M in outside funding (attachment A). The document was generated and then reviewed by UGA administrators and the final version was delivered to Ms. Sigal's office late afternoon on May 12th, 2005. The next information regarding the SREL budget that I received came two weeks later from UGA administrators who told me that the GA delegation received confirmation that SREL would receive \$4.3 M in funding for FY 06, with \$3M coming from DOE-SR, \$1M from the Office of Science, and \$300K from NNSA. While this level of funding enabled SREL to survive, it represented a 47% reduction in funding from FY 05 and led to a staff reduction of about 30%.

On June 27th, 2005, I received a FAX from Senator Chambliss' Office of a memorandum from Charles Anderson, Principal Deputy Secretary for Environmental Management, to Mr. Jeffrey Allison, the DOE SR-Site Manager (attachment B). The memorandum stated **"SREL is important to the Environmental Management (EM) Program and other Department of Energy (DOE) program offices. Research projects will be conducted to address DOE needs as related to cleanup, stewardship, SRS end state, and potential new SRS missions"**. The memo went on to direct Mr. Allison to work with me and my staff to develop the scope of the new cooperative agreement to commence July 1, 2006; **"In addition, DOE-SRS is requested to prepare a new cooperative agreement that begins July, 2006 to establish a framework for future SREL activities."** On July 1, 2005, I received a letter from Mr. Allison which captured the major elements of Mr. Anderson's memo in addition to stating that he (Mr. Allison) had directed DOE-SR contracts personnel to begin work on the new five-year cooperative agreement **"I have directed the Office of Contracts and Management to begin the process to renew the cooperative agreement for an additional 5 years to establish a framework for future SREL activities"** (attachment C). At this point I would like to emphasize that at no time was it communicated to me that any element of the funding portfolio document previously submitted to Ms. Sigal needed to be modified in any way or that the document contained unrealistic expectations from DOE's perspective.

Following Mr. Anderson's directive, deliberations leading to the negotiation of the new cooperative agreement commenced in an August 2005 meeting with Mr. Allison and other members of his staff, including Mr. William Spader, Deputy Manager; Mr. Roger Butler, Assistant Manager for Business; and Dr. Karen Hooker, Director of the Environmental Health and Quality, who also served as SREL's Program Manager. We discussed SREL's reconfiguration plan to address the 47% reduction in funds and ~30% reduction in work force from FY 05 to 06. Mr. Allison was pleased with the plan and the smooth and safe transition, but stressed his interest in SREL maintaining a strong outreach program despite the reduction in funding and staff. We discussed what research areas SREL should focus on given the guidance we received from DOE-HQ. I spoke of SREL's expertise in providing site specific data that could be used in cost avoidance activities such as use of monitored natural attenuation and in developing long-term surveillance and monitoring activities, as well as the work focused on environmental stewardship. Mr. Spader told Mr. Allison the site specific work and long-term surveillance and monitoring activities were very important to the EM closure program. We also discussed a funding level needed to keep SREL viable. I was asked what my understanding was of the Offices of Science's funding for FY 07 would be, i.e., was the \$1M recurring? I answered that I was sure it was not and while we would continue to pursue grants from the Office of Science we could not expect future funding for the SREL program. I also mentioned that UGA would be reducing its additional investment of state funding beginning July 1, 2007. Mr. Allison indicated that we should plan on a budget of \$4M in EM funds in FY 07 and, while not making a firm commitment, we should also request additional funds to make up for the decrease in GA State funding for FY 08. Mr. Allison directed Dr. Hooker and me to work together to develop the work scope for the new cooperative agreement commensurate with a \$4M funding level.

Dr. Carl Strojan, Associate Director of SREL and I met monthly with Dr. Hooker and Mr. Dennis Ryan to define the work scope and other details of the cooperative agreement beginning September, 2005. Early drafts of the CA were passed back and forth beginning in November, 2005. Mr. Donnie Campbell, Contracting Officer for DOE- SR sent a letter to Dr. David Lee, UGA's Vice President for Research requesting a follow-up cooperative agreement (CA) based on FY 06 funding base-line for a 12 month base budget year and four 12-month renewal Periods of Performance (attachment D). UGA submitted a final version of the proposed agreement to DOE in February, 2006.

In a March, 2006 budget meeting involving SREL's Administrative Financial Director Dr. Laura Janecek, and Ms. Sarah Blanding, the SRS-CFO, confusion arose relative to DOE-EM's funding level for support of SREL's work in FY 07. The CFO indicated that it was her understanding that DOE-SR would be providing SREL \$3M for FY 07 as in FY 06. As this was inconsistent with previous discussions, I sent a letter dated March 26, 2006 to Mr. Allison requesting clarification. I received verbal assurance confirmed by a letter from Mr. Allison dated March 31, 2006 reiterating that DOE-SR would provide \$4M in EM funds to support SREL research activities broadly defined in appendix A of the cooperative agreement and more specifically in the 2007 research plan (attachment E). During a visit to the SRS by Dr. David Lee (UGA VP-Research) Mr. Allison reiterated the importance of SREL to the SRS and the intention of DOE-SR to adequately fund SREL to carry out its work. Mr. Allison also acknowledged the difficult reconfiguration process that SREL was subjected to in FY 06, praised the reconfiguration plan developed by SREL, and stated "SREL will not close on my watch."

In June 2006, the DOE review of the CA submitted by UGA in February was still not complete and DOE extended the existing CA until September 30, 2006.

The DOE review and negotiations on suggested changes to the cooperative agreement were completed by the end of August 2006. In early September a signing ceremony for the CA was discussed with Mr. Allison and Dr. David Lee and a date in late September was planned. The completed CA was sent to Washington D.C. for 48 hr. notification of Congress and was returned for signing the week of September 4. DOE contracts personnel alerted SREL that they anticipated Mr. Allison's signature on Friday, September 8 and requested SREL to confirm David Lee's availability to sign the CA.

Just prior to Mr. Allison's planned signing the CA, he ordered all DOE-SR contracts be submitted for 72 hr not 48 hr notification, which follows a different procedure. Mr. Allison ordered the SREL cooperative agreement to go through the 72 hr. notification process.

During the process involved in 72 hr. notification to Congress many questions began to be raised and DOE-SR began requesting additional information from SREL. Eventually I was told that Ms. Jill Sigal had become involved and was questioning the terms of the CA that had been worked out over the previous year following the guidance provided by Mr. Anderson in June 2005 memo (*vide supra*). I was also told that Mr. Allison was directed not to sign the CA.

In an October 3, 2006 meeting involving Dr. Strojan, Mr. Campbell, Mr. Allison and me, Mr. Allison stated that he was being directed to commit only \$1M in EM funds for FY 07 and nothing in the out years of the CA. I indicated that if we were to only receive only \$1M in FY 07 that I would have to develop a closure plan. Mr. Allison stated that closure not an option; SREL's work was too important to the SRS and EM needed this work. I was directed by Mr. Allison to work with the three EM line organizations on the SRS to "projectize" SREL's work scope defined in appendix A of the CA and specifically in the research plan for FY 07. Mr. Allison also volunteered to call Dr. David Lee or Dr. Arnett Mace (UGA Provost) to describe the intention of DOE to fund SREL's work through this alternate funding paradigm and to provide assurance that there would be sufficient support of SREL programs via this alternate mechanism. An additional extension of the CA was required until the end of December 2006, even though SREL only had sufficient funding to operate through the end of November. The delay in signing of the CA attracted attention from the SRS Citizens Advisory Board, the press, and ultimately Congressmen and Senators from both GA and SC. There were several articles in the Augusta, Aiken, and Columbia newspapers.

A meeting was arranged with the assistant managers of the three EM line organizations (Waste Disposition Project (WDP), Soil and Groundwater Closure Project (SGCP), and Nuclear Waste Stabilization Project (NWSP)) Dr. Hooker, Mr. Ryan, other representatives of the three line organizations, Dr. Strojan and me. Mr. Spader opened the meeting stating that SREL needed to work with the three line organizations to "projectize" the work scope in the FY 07 research plans. He stated that SREL was important to the EM mission and indicated that the SRS needed to identify \$800 M in cost avoidance in the upcoming years and that SREL, in addition to executing its role in long-term stewardship, would play a major role in this effort. Mr. Spader then left the meeting. The discussion then turned to focusing on the mechanics of "projectizing" the work scope.

In early November 2006, Mr. Allison told me that SREL should work with program personnel on "projectizing" the work scope demonstrating the mission related nature of the projects. He also indicated that he was no longer going to be involved directly in the process but that Mr. Ryan and Mr. Ben Gould were to be the points of contact.

The funding language inserted by DOE-HQ into the CA continued to evolve and become more complicated throughout October and November 2006. The last version committed \$1M in

funding from EM for infrastructure and up to \$4M in task funding. In another conversation in November 2006, Mr. Allison once again suggested that he would be willing to describe the new procedures for funding SREL's work to Dr. David Lee to verify that sufficient funds to operate SREL would be available in FY 07. Given that SREL was going to run out of funds sometime in December, UGA and SREL felt that there was no alternative but to sign the CA with the new complicated funding language and to work in good faith to make the alternate funding model work. The new cooperative agreement was signed in December 2006.

We continued to work in good faith with representatives from DOE-SR to "projectize" the work scope. In late January, 2007 the process was completed and the funding was identified (~ \$3 M including \$391 K provided by the contractor in FY 06). The new funds could not be transferred until the continuing resolution for the FY 07 budget was resolved. SREL was told that while DOE-HQ would not be involved in these FY 07 funding decisions, they would likely commence a review of the FY 07 projects and guide decisions for FY 08. SREL and DOE-SR program staff were urged to begin work on the FY 08 projects. This process was begun in early February 2007. SREL was contacted the week of February 12, 2007 and told that project funding was to be transferred to SREL's CA.

In a February 20 meeting, Mr. Allison announced that, as part of the planned DOE-SR restructuring, SREL would now report to the Assistant Manager for Closure Projects, Ms. Yvette Collazo and that he would be handing off day to day responsibility of the SREL program to Ms. Collazo. I discussed my frustration with the inefficiency of the process for "projectizing" SREL's work scope and that having this completed 5 months into the FY made planning virtually impossible. Mr. Allison indicated that this was the first time through and he agreed that we needed to streamline the process. Mr. Allison then left the meeting turning it over to Ms. Collazo. Ms. Collazo then announced that she had just participated in a conference call with DOE-HQ and stated that they intended to "peer review" each project for **FY 07** to evaluate the "mission critical nature" linked to specific Project Baseline Schedules (PBSs) in FY 07 prior to release of **any** project funding. I indicated that this was not our understanding and that we had begun work on the FY 2008 projects. Ms. Collazo indicated that she was new to the program and that these were her orders from DOE-HQ and that we needed to get to work on revising the project list for FY 07 and link projects to specific PBS elements and demonstrate the "mission critical" nature of the work in FY 07. I then asked for clarification on the definition of "mission critical" as well as the nature and the timetable of the "peer" review process. No specifics were available nor have ever been provided. The evolution of the presentation of the tasks beginning with the FY2007 research plan through the final "peer reviewed" task matrix table can be captured in attachment F, although there were several additional iterations not included in this attachment. In an April meeting with Ms. Collazo, Mr. Mark Gilbertson, Dr. Strojan and me, we were told that the outcome of the peer review of SREL projects would result in no additional funding for FY 07 as only those projects funded by the contractor with FY 06 funds were deemed mission critical for meeting FY 07 goals. This discussion was formalized in a letter from Jeff Allison to me dated May 7, 2007-more than seven months into the FY.

At the end of June ~40 SREL employees lost their jobs and more involuntary separations will occur over the next year as various non-DOE funded contracts and grants end. In the absence of additional funding from DOE, it is likely that SREL will be closed as indicated in a recent letter from UGA President Michael Adams to Secretary Bodman. Thus, a unique 56-year old laboratory with a long institutional memory about the SRS and its operations and impacts that plays an important role in generating information needed for human and ecological risk

assessments, for the development and implementation of novel alternate remediation strategies, and for ensuring the long-term stewardship of the 310 square mile SRS reservation will be lost. While the human cost associated with involuntary separation of employees is always difficult, it is particularly tragic in this instance. SREL employees are extremely dedicated individuals who are committed to their important work. As an example, even with the budget uncertainty this spring, very few SREL employees left for other jobs as they all were dedicated to the institution and they worked hard to ensure SREL's continued success. Some SREL employees who were terminated June 30, 2007 continue to report to work feeling compelled to wrap up their research projects and organize their data so it will not be lost forever. The SREL support staff is equally dedicated, as they feel directly connected to the important research conducted by SREL researchers and are proud that they enable the internationally acclaimed research accomplishments of their colleagues. The closure of SREL will be felt by the SRS, as DOE program managers, contractors, and regulators have relied on the data and information provided by SREL researchers over the years. This unfortunate and totally preventable event is especially troublesome to the general public in the Central Savannah River Area and in the down river communities who have come to rely on the open and independent evaluation of the impacts of SRS operations on the overall environment. This looms especially large as the SRS enters a new phase of plutonium processing for disposition of excess stockpiles, while at the same time planning to emplace significant quantities of reclassified high-level radioactive waste tank residuals. Finally, as the status of Yucca Mountain continues to be uncertain, vitrified high-level waste being generated at the SRS appears to be destined to remain stored on the SRS well into the future.

In summary, the events discussed in my testimony above, backed by written and verbal documentation, reveal what appear to be unusual and extraordinary events along with contradictory direction on part of DOE-HQ personnel leading to the funding impasse of the SREL cooperative agreement. Mr. Jeffrey Allison was clearly charged in a June 2005 memo from Mr. Charles Anderson to work with me and my staff to define the scope for a new cooperative agreement. This process commenced in August 2005 and concluded in August 2006 with a cooperative agreement that was ready to be signed in September 2006, prior to interference from DOE-HQ. Mr. Anderson's June 27, 2005 memo to Mr. Allison directly lifted verbiage from the funding portfolio document that I submitted to Ms. Jill Sigal on May 12, 2005 as guidance for activities that SREL should include in the new cooperative agreement. In the absence of any other feedback concerning the funding portfolio document, it was clear to me that the \$2 to \$3.5 M target for DOE-SR task related work was accepted by DOE-HQ. While the funding language of the CA was changed via DOE-HQ insistence in the September-November 2006 time frame, we worked in good faith with DOE-SR personnel to projectize our work scope and I believe that DOE-SR personnel were also working in good faith. Until May 7, 2007, Dr. Strojjan and I were consistently told by SRS management and program staff that SREL's work was important, that there was a need for the work, and that there was sufficient funding for the work. In my 23 years at SREL all CAs and M&O contracts have always been developed with the SRS Site Manager and program staff and there has never been involvement from DOE-HQ of this magnitude. In fact, Article XXIX of the cooperative agreement on Evaluation, Analysis, Assistance, and Approval states "evaluation, analysis, assistance, and approval required by this Agreement shall be accomplished at the DOE's Savannah Operations Office, Aiken, South Carolina, by the Contracting Officer or his duly authorized representatives." These facts along with Section 8.0 of the Savannah River Operations Office Human Capital Management Systems

Manual, Chapter 1, Section 1.1, Rev 2, which states that the Manager can authorize procurement contracts up to \$5 million "without review", as well as the obvious fact that SRS program personnel are in the best position to understand site needs, led me to believe that SRS management and program personnel were responsible for deciding what should be funded and at what appropriate level. Furthermore, the notion that SREL submitted proposals that were "peer reviewed" and deemed not supportive of SRS or DOE missions is unsubstantiated by any facts surrounding the events that actually took place. As one can see from examining attachment F, we were asked to transform our research plans developed with SRS program staff to meet SRS needs and objectives and containing sufficient detail into a matrix table where specific tasks were represented by several line descriptors. These matrix tables simply could not undergo a peer review according to DOE's own requirements stipulated in 10 CFR 600.3 for management of cooperative agreements. Furthermore, we were never provided any detail about the peer review process nor did we receive written comments from the peer review. I submit that this is because there never was a peer review actually executed as required by 10 CFR 600.3.

I also want to address claims that we have not been aggressive in pursuing other funding opportunities as stated in letters from DOE to this committee and by DOE spokespersons in the press. SREL scientists currently have \$5.25 in current contracts and grants and brought in close to \$2.5 M in UGA FY 07. This is a very strong record of competitive funding for an environmentally focused organization of only 11 faculty members. This meets the target in the funding portfolio document that I submitted to Ms. Sigal in May 2005. Finally, even if one were to condone DOE-HQ's role in developing and controlling a task funding process and making decisions on tasks as small as \$30,000, would any reasonable individual believe that a process whereby the outcome is revealed seven months into the FY is fair or makes good business sense?

Once again, I thank you for this opportunity to testify before this joint hearing and I look forward to your questions.