UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

FEB 10 2000

4WD-FFB

000371

Ms. Karen Patterson, Chairperson
SRS Citizens Advisory Board
P.O. Box 365
Barnwell, South Carolina 29812

SUBJECT: SRS CAB Recommendation Nos. 67, 68, and 71

Dear Ms. Patterson:

The Environmental Protection Agency (EPA) has received the Savannah River Site (SRS) Citizens Advisory Board (CAB) recommendations noted above. We thank you for your recommendations concerning these important issues related to cleanup at SRS.

Recommendation No. 67 requests EPA to identify the conditions under which CERCLA waste can be disposed into the SRS Low Level Radioactive Waste Disposal Facility Slit Trenches. Our enclosed response provides a detailed description of EPA's consideration for use of the Slit Trenches for CERCLA waste disposal, restating the rationale we have previously provided to the CAB in numerous subcommittee meetings and through electronic mail over the last eighteen months. In summary, EPA, the South Carolina Department of Health and Environmental Control, and the Department of Energy have agreed that a low level waste disposal site may not be selected without appropriate consideration and comparison of other alternatives in order to ensure the protectiveness of the cleanup remedy.

Responses to CAB Recommendation Nos. 68 and 71 are also enclosed. We appreciate the Board's input and encourage continued active participation in the challenging issues we face in the Federal Facility cleanup program.

If you need further assistance as the dialogue on SRS Slit Trench disposal continues, please contact Julie Corkran of my staff at (404) 562-8547.

Sincerely,

John H. Hankinson, Jr.
Regional Administrator

cc: Lewis Shaw, SCDHEC
Ann Clark, SCDHEC
Greg Rudy, DOE-SRS
Dawn Haygood, WSRC-SRS

EPA Response to SRS CAB Recommendation No. 67:
Disposal of Low-Level Radioactive Waste from SRS CERCLA Site in Trenches of SRS Low Level Waste Disposal Facility

The background portion of Recommendation No. 67 suggests that the regulatory agencies should have accepted the remedial alternative of disposing of contaminated soils from the Savannah River Laboratory (SRL) Seepage Basins in the Low Level Waste (LLW) Disposal Facility (Slit Trenches) because "SRS spent considerable resources developing that option" and the regulatory agencies had not objected to the disposal of contaminated vegetation there. Expressing its desire to "settle the use of the trenches for LLW now", the CAB recommends that the agencies predetermine, outside the context of any particular remedy selection decision, the circumstances under which disposal of CERCLA wastes in the Slit Trenches would be approved. The Environmental Protection Agency, the South Carolina Department of Health and Environmental Control, and the Department of Energy (DOE) have worked closely to evaluate a universal approach to disposal of radioactively contaminated soil and debris (i.e., "Plug-in ROD" and "Radioactive Soil/Debris Consolidation Disposal Facility"). The DOE has stated that it does not intend at this time to pursue use of the Slit Trenches as a universal repository for CERCLA waste meeting the facility's waste acceptance criteria (see September 1998 CAB meeting minutes).

EPA believes that the CERCLA process for selection of remedial action, as set forth in the National Contingency Plan (NCP), requires the development and analysis of multiple plausible alternatives in the Feasibility Study. It is inherent in such a process that not all of the developed alternatives will ultimately be selected: resources will necessarily be spent to explore some options which are eventually discarded in favor of better ones. With respect to the SRL Seepage Basin, expenditures of resources to develop an alternative involving disposal "off-site" (i.e., beyond the areal extent of contamination and the area in close proximity) in the SRS Slit Trenches facility were not caused by the regulatory agencies leading SRS to suppose that this alternative would necessarily be selected. Rather, resources were expended to study this disposal possibility because it was one plausible alternative and merited development for the comparative analysis which CERCLA remedy selection mandates.

EPA has previously determined that disposal in the Slit Trenches may be appropriate for disposition of the vegetation contaminated with very low concentrations of radionuclides as a portion of DOE's time-critical removal response actions (Letter of March 13, 1998, from Crane to Hennessey). These removal actions were necessary to minimize potential for migration of windblown radionuclide contaminated vegetation and any potential for exposure. Hence, EPA has agreed that the Slit Trenches provided a protective alternative in the specific instance of this time-critical response action. By comparison, the potential for current exposure to SRL Seepage Basin soils is low and thereby did not warrant consideration of a similar time-critical response action. Such an action would effectively transfer highly contaminated soils from one disposal area to another without any marginal improvement of potential for current exposure. Rather, a deliberative consideration of plausible alternatives was pursued for a final remedial response action.

Additionally, EPA issued a determination some time ago, in accordance with this Agency's "Off-site Rule", 40 CFR Section 300.440, that the Slit Trenches were acceptable for receipt of off-site CERCLA waste (Letter of August 8, 1996, from Green to Hennessey). However, the parties to the Federal Facility Agreement (FFA) have also previously participated in a CERCLA evaluation of the potential for use of the Slit Trenches, among other SRS and non-SRS off-site facilities, as a consolidated disposal alternative to on-site cleanup at individual operable units (see Alternative Screening Report Radioactive Soil/Debris Consolidation Disposal Facility/Off Unit Disposal, May 1997, WSRC-RP-96-893, Revision 1). Following this evaluation, the parties to the FFA agreed (and CAB Recommendation No. 34 concurred) that (i) an SRS consolidation facility would not serve as the best balance of the nine CERCLA remedy selection criteria, and (ii) SRS should pursue individual cleanup decisions at operable units, with emphasis on in-place cleanup of operable unit soil and debris of those unit located near reactor facilities. DOE, EPA, and SCDHEC have embraced CAB Recommendation No. 34 and have made, or are pursuing, many cost-effective remedy selections that will contribute to the overall success of the cleanup program.

Under CERCLA, the decision about appropriateness of a proposed remedial action involving off-site disposal must be made independently from, and prior to, any application of the Off-site Rule. Further, each remedy selection must be based on a comparative evaluation considering the range of alternatives available for that particular action. In accordance with the process specified in the NCP for selection of remedial actions, every alternative must be evaluated against nine specified remedy selection criteria as well as for consistency with the statutory preferences and other NCP program management expectations. One such preference is the statutory bias against off-site land disposal (Note: Slit Trenches are an off-site land disposal facility) of hazardous substances (CERCLA Section 121(b)). Generally, on-site remedies are preferred over off-site alternatives in order to avoid creation of new problems by off-site transfer of waste. This supports the main goal of the Off-site Rule: to ensure that Superfund-generated wastes do not contribute to future environmental problems. Placement of CERCLA wastes into the Slit Trenches cannot be pursued without consideration of other alternatives and would also require assessment of the current regulatory status of the Slit Trenches.

The prevention of future environmental problems should be an especially significant goal with respect to areas within the Savannah River Site which was placed on the NPL to make it a national priority for cleanup. Indeed, the essential purpose of our CERCLA-mandated Federal Facility Agreement is to complete the cleanup so that the site no longer presents a threat to human health and the environment and can be deleted from the NPL. Especially in light of our awareness that disposal in a radioactive soil/debris consolidation disposal facility did not compare favorably under previous analysis with in-place cleanup of soil and debris from most operable units, EPA continues to believe that the evaluation of the Slit Trenches disposal alternative should only occur on an operable unit basis, and not by any process of predetermination.

EPA has supported the use of a soil/debris consolidation disposal facility at the DOE-Oak Ridge Reservation (ORR) in Tennessee. Selection of this alternative was achieved through comparison of waste disposal alternatives for the types and volumes of wastes that will be generated during cleanup under the ORR Federal Facility Agreement against the nine CERCLA remedy selection criteria. The Record of Decision was signed by DOE, the Tennessee Department of Environment and Conservation, and EPA in December of 1999. Designed to meet the requirements of a RCRA land disposal facility, the ORR soil/debris consolidation facility design, construction, and operation will be subject to state and EPA oversight to ensure that Superfund-generated wastes do not contribute to future environmental problems.

EPA Response to SRS CAB Recommendation No. 68:
SRL Seepage Basin Contaminated Soils Disposal

The SRS CAB recommends that SRS enact the preferred alternative identified by the DOE, EPA, and SCDHEC for the Savannah River Laboratory (SRL) Seepage Basins. The cleanup proposed for the SRL Seepage Basins includes implementation of institutional controls in conjunction with contaminated soil excavation and disposal at an approved, licensed, out-of-state low-level waste disposal facility. EPA has determined that this alternative is protective of human health and the environment while achieving the best balance of the nine CERCLA criteria for remedy selection, including cost-effectiveness and State acceptance. The CAB's support of the cleanup remedy for this waste site is appreciated. DOE-SRS, SCDHEC, and EPA are approximately fourteen months ahead of the Federal Facility Agreement cleanup schedule for SRL Seepage Basins: the final ROD was signed, and cleanup activities initiated, in December of 1999.

EPA Response to SRS CAB Recommendation No. 71:
Closure of the Old Radioactive Waste Burial Ground

The SRS CAB recommends that the regulatory agencies provide representation to the Old Radioactive Waste Burial Ground (ORWBG) Focus Group, a task group of the CAB Environmental Remediation and Waste Management Subcommittee. Since the inception of the ORWBG Focus Group, EPA has frequently attended the Focus Group meetings and participated in discussions on many topics including RCRA/CERCLA integration, human health risk assessment assumptions and outcomes, and proposed remedial alternatives for cleanup of the ORWBG. As the Focus Group explores final remedies for the ORWBG, they should be aware that processes or methodologies inconsistent with the CERCLA remedial approach, particularly approaches that compromise the protectiveness of the CERCLA risk assessment process, cannot be supported by EPA. As resources permit, EPA will continue to actively participate in Focus Group discussions as the three agencies and the CAB complete their evaluation of the Feasibility Study and Proposed Plan.