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

AUG 2001

Ms. Karen Patterson, Chairperson
Savannah River Site Citizens Advisory Board
1103 Conger Drive
Aiken, South Carolina 29803

Dear Ms. Patterson:

Thank you for your letter dated July 30, 2001, on behalf of the Savannah River Site (SRS) Citizens Advisory Board (CAB), sharing Recommendation ~~141~~ 140 regarding the screening of cleanup alternatives for the Old Radioactive Waste Burial Ground. The recommendation requests that the Environmental Protection Agency (EPA) incorporate findings two through seven into the suite of remedial actions being evaluated for this waste unit. EPA's specific response to each of the CAB's findings in Recommendation ~~141~~ 140 is provided as a separate enclosure to this letter.

EPA appreciates the Board's support for the interim remedy selected by the Department of Energy-Savannah River Site (DOE-SRS) and the regulatory agencies for the twenty-two old solvent tanks at the Old Radioactive Waste Burial Ground. DOE-SRS, the South Carolina Department of Health and Environmental Control (SCDHEC), and EPA have accelerated the CERCLA process for this waste area by identifying these tanks as a subunit for early cleanup action. EPA expects to concur with the Interim Record of Decision by September 2001, and grouting to stabilize the tank structures will begin immediately thereafter, in November 2001. DOE is targeting completion of the interim action by February 2003.

We value the Board's feedback and the sustained level of commitment demonstrated by the Burial Ground Focus Group during this three year effort on the Old Radioactive Waste Burial Ground. If you need further assistance, please feel free to contact Julie Corkran of the EPA Region 4 staff at (404) 562-8547.

Sincerely,

A. Stanley Meiburg
Acting Regional Administrator

Enclosure

cc: Lewis Shaw, SCDHEC
Keith Collinsworth, SCDHEC
Greg Rudy, DOE-SRS
Dawn Haygood, WSRC-SRS

EPA Response to CAB Recommendation No. ~~141~~ 140
Old Radioactive Waste Burial Ground (ORWBG) Focus Group Final Report

Recommendation ~~141~~ 140 requests that EPA respond to findings two (2) through seven (7) of the Old Radioactive Waste Burial Ground Focus Group Final Report. Each finding and EPA's response are presented below. EPA also appreciates the Minority Report opinion recognizing the responsibility of DOE-SR and the regulatory agencies to select remedies that comply with CERCLA, the NCP, and state standards. EPA strives to be flexible and creative in the identification of possible remedial alternatives for cleanup while ensuring that the remedies ultimately selected are logically and legally defensible, achieve promulgated standards, and above all are protective of human health and the environment.

(2) *Develop IC specific to the ORWBG and the area between the ORWBG and Fourmile Branch by April 2002.*

EPA agrees with the SRS CAB that the final remedy for this waste unit will include Institutional Controls (IC) developed specifically to respond to the future human health and environmental risks posed by the wastes which will remain in place.

(3) *Fill the solvent tanks with grout to stabilize them and then cover this portion of the ORWBG with 2 to 8 feet of low permeability soil to match the rest of the ORWBG.*

EPA acknowledges and appreciates the Board's support for the selected interim remedy for the Old Solvent Tanks at the Old Radioactive Waste Burial Ground. The interim action includes grouting to stabilize the tank structures in preparation for the final remedy for the entire waste unit. The final remedy will include a low permeability soil cover and appropriate land use controls.

(4) *Develop a land management strategy to minimize erosion, prevent deep-rooted plants from encroaching, and discourage burrowing animals and insects from bringing waste to the surface.*

EPA agrees that final cover for the Old Radioactive Waste Burial Ground must be managed into the future in a manner to prevent the wastes being exposed at the ground surface, potentially resulting in unacceptable exposures and migration of the wastes. Similar land management strategies have been developed and are being implemented successfully in conjunction with other interim and final remedies at DOE-SRS.

In accordance with the Land Use Control Assurance Plan (LUCAP) Memorandum of Agreement between DOE-SRS, EPA and SCDHEC, the final remedy for this waste unit will include a Land Use Control Implementation Plan (LUCIP) that details the land use control components of the remedy, provides for periodic inspections and corrective actions to ensure that the integrity of the cover is maintained, and requires annual reporting by the SRS Site Manager to the EPA Regional Administrator certifying compliance with all site-specific LUCIPs to ensure continued protection of human health and the environment.

(5) *Consider refining the groundwater transport calculations for Volatile Organic Compounds (VOCs) and other Constituents of Interest (COIs) (other than tritium) in order to be consistent with measurements.*

As described in EPA's response (dated March 23, 2000) to CAB Recommendation No. 86 on the Corrective Measures Study/Feasibility Study (CMS/FS), EPA agreed with the CAB's conclusion that the CMS/FS, including the approach to groundwater modeling, provides a good basis for making decisions about the cleanup of this waste unit. However, in response to concerns regarding whether the modeling is sufficiently conservative to identify protective cleanup actions, EPA has initiated reviews of the DOE-SRS groundwater modeling efforts by EPA technical experts located in our Ada, Oklahoma, and Cincinnati, Ohio, offices. The results of those reviews will be shared with DOE-SRS, SCHDEC, and the CAB in support of final remedy selection.

(6) *Do not excavate buried plutonium from the ORWBG.*

EPA agrees with the CAB that excavation of buried plutonium from the Old Radioactive Waste Burial Ground is not an appropriate component of the final remedy for this waste unit. Remedial alternatives for excavation of long-lived radionuclides, including plutonium, were screened out early in the CERCLA Feasiblity Study (FS) process based primarily on worker safety concerns.

(7) *Establish a mixing zone for the ORWBG groundwater plume during active and passive IC. Consider different mixing zones for active IC and for passive IC.*

Per the National Contingency Plan (NCP), EPA expects groundwater remedies at SRS to restore groundwater to beneficial reuse as a potential drinking water source by achieving Maximum Contaminant Levels (MCLs). Mixing zone applications have been approved and selected as components of other groundwater remedies at the Savannah River Site when the site-specific circumstances have met the screening criteria established by SCHDEC. In the case of the Old Radioactive Waste Burial Ground groundwater plume, EPA supports the State's evaluation and conclusion that a mixing zone is not a viable cleanup alternative since tritium in the groundwater plume currently discharges to surface water at concentrations exceeding the regulatory standard.