Recommendation No. 76

January 26, 1999

Plug In Records of Decision

Background:

The Department of Energy-Savannah River (DOE-SR), in concurrence with the Environmental Protection Agency-Region IV and the South Carolina Department of Health and Environmental Control (DHEC), plans to employ a Plug-In-Record of Decision (ROD) to the selection of a common remedy for multiple environmental remediation Operable Units (OU's) that meet the following criteria: radionuclides are the primary soil contaminants, the OU is located in an industrial zone, the OU contains soils with principal threat source materials (see footnote), and its contaminated soils are not in direct contact with surface water or groundwater. The selected common remedy is In Situ Stabilization with a Low-Permeability Soil Cover. Remedy selection was based on the Old F-Area Seepage basin and the L-Area Oil and Chemical Basin Record of Decision. Both of the remedy selections for these OU's have been reviewed and supported by the Board (see Ref. 1 and 2).

Plug-In-ROD's streamline the remedy decision process, reduce documentation, and facilitate quicker cleanups. The result is a more efficient process that costs significantly less. Candidate OU's are "plugged" into the primary ROD, replacing the individual ROD's currently required for each OU. This approach has been used successfully by EPA at other Superfund sites and at the DOE Hanford site (e.g., it was first developed by EPA at the Indian Bend Wash Site in Tempe, AZ). It has been endorsed by EPA's National Remedy Review Board. Remarkably, despite the significant benefits provided by the use of Plug-in-ROD's, the SRS CAB is the first Board in the DOE complex to endorse the Plug-In-Rod concept (Ref. 3).

The four candidate OU's consist of eight unlined reactor seepage basins used to purge radioactive process water from reactor disassembly basins. Each has a similar history and similar contamination characteristics. The candidates are the three C-Reactor seepage basins, K-Reactor seepage basin, L-Reactor seepage basin, and the three P- Reactor seepage basins. While the first candidates have been selected, other OU's that satisfy the criteria will be considered later under the Unit-Specific Plug-In Decision Document.

This first Plug-In ROD does not address the groundwater under the OU's. Thus, for those OU's either without ground water or where the groundwater has been administratively separated, the Plug-In-Rod will be final. Characterization of L- and K-Reactor seepage basins is complete and Unit-Specific Plug-In Decision Documents for these two OU's are scheduled for publication in March, 1999, as final ROD's. In contrast, the C- and P Reactor seepage basins have groundwater which are still considered to be a part of their OU's, making the plug-in-rod for them interim ROD's.

Recommendation:

As the first Citizens Advisory Board (CAB) to endorse this concept and see it come to fruition, the CAB commends the three agencies for making the concept of Plug-In ROD's a reality at SRS. We recommend that each of the three agencies build on their very fine accomplishment by making a

commitment to expand the use of Plug-In ROD's at SRS to significantly reduce the costs of cleanup, the regulatory paperwork, and the time involved in achieving actual site remediation in the field.

In addition, the Board recommends that the three agencies:

- 1. Implement a Plug-In ROD for the four candidate OU's (i.e., C, K, L, and P reactor seepage basins). Provide an overall schedule to the Board by its May 24-25, 1999, meeting for the implementation of the Plug-In ROD and the initiation of field work for the four candidate OU's.
- 2. Provide to the CAB a list of additional OUs that meet the specified criteria for this Plug-In ROD as they become identified.

Footnote

For this Plug-In ROD principal threat source materials are defined as contaminated basin sediments and subsurface basin soils which pose an unacceptable risk of cancer due to theoretical exposure to radiological contaminants to a future industrial worker equal to or greater than one chance out of a thousand.

References

- 1. Recommendation No. 21, Old F-Area Seepage Basin Cleanup, adopted May 14, 1996
- 2. Recommendation No. 37, L-Area Oil & Chemical Basin and L-Area Acid/Caustic Basin, adopted May 13, 1997
- 3. Recommendation No. 46, Plug-in-ROD Approach, adopted November 18, 1997

Agency Responses

Tri-Party Response

Department of Health and Environmental Control