Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

MAR 17 2014

Dr. Marolyn Parson, Chairperson
Savannah River Site Citizens Advisory Board
P.O. Box A
Aiken, South Carolina 29802

Dear Dr. Parson:

SUBJECT: Citizens Advisory Board (CAB) Recommendation Number 318 – Technology of Groundwater Cleanup (Your letter, dated 01/28/2014)

Thank you for your recommendation on Technology of Groundwater Cleanup. The Department of Energy (DOE) Savannah River Operations Office accepts your recommendation and provides the following responses to the recommendation:

1. Assess the Groundwater Cleanup Program with the idea in mind of determining if there are elements of the Savannah River Site (SRS) Groundwater Cleanup Program that would be useful to other DOE sites and industrial sites, and

2. Develop a program for potentially assisting and advising other DOE sites of our experience and capabilities, as well as appropriate media outlets.

SRS has been, and continues to be, actively involved with communicating SRS groundwater cleanup technologies, techniques and approaches. SRS has a program in place that identifies and shares our experiences and capabilities regarding groundwater cleanup technologies with the other sites in the DOE complex, and with the public and the private sector. For example, SRS's ongoing activities in this regard include:

- Savannah River National Laboratory (SRNL) Involvement - SRNL is actively involved in research and development, bench scale and field testing of soil, and groundwater remedial technologies and approaches at SRS. SRNL shares and exports information on groundwater cleanup technologies and approaches within the DOE complex, nationally and internationally, through the DOE Office of Environmental Management (EM) Technical Assistance Program (see the paragraph below for additional details). In addition, SRNL regularly publishes technical information (e.g., technical reports, journal articles, fact sheets, etc.) and provides technical presentations at national and international conferences and technical society meetings related to its research into the development and deployment of groundwater treatment technologies and approaches.

- SRS Support of DOE-EM - For more than a decade, the DOE-EM Technical Assistance Program has provided applied solutions to DOE sites facing challenging environmental and technical problems. Throughout the history of the program, SRNL-led teams of nationally recognized experts have provided support to DOE's small sites and closure sites - including Paducah, Portsmouth, Pinellas, Ashtabula, Fernald, Mound, and the Kansas City Plant - as well as to large sites such as Oak Ridge, Los Alamos, and Lawrence Livermore. Teams typically visit the site and interact with DOE, contractor, and, in some cases, regulatory personnel. Drawing upon many of the successes achieved in the SRS Cleanup Program, the DOE-EM Technical Assistance Program is structured to be practical and efficient, implementing and formalizing the most successful and productive applied science and technology deployment strategies.

- SRS Involvement in Key DOE Headquarters (HQ) and Complex-wide Interface Initiatives - SRS is involved in the cross-sharing of groundwater remedial technologies and approaches through regularly scheduled conferences calls with DOE-HQ and with other DOE sites. The conference calls are part of key initiatives known as the Advanced Simulation Capability for Environmental Management, the Attenuation Based Remedies for the Subsurface - Applied Field Research Initiative, and the DOE Community Call of Practice.

- SRS Support of the DOE-HQ Groundwater Assessment and Data Base Management Plan - DOE-HQ maintains a technical data base electronically which is available throughout the DOE complex and is anticipated to be available to the public in the near future. This data base provides current information on groundwater cleanup technologies and approaches being employed by DOE sites. SRS provides data input regarding SRS groundwater remedies, including innovative 'Next Generation" groundwater cleanup technologies (e.g., base injection, subsurface barriers edible oil injection) into this data base routinely.

Provided below for your information are some examples and related electronic links in support of the above:

Treatability Study for Edible Oil Deployment for Enhanced cVOC Attenuation for T-Area, Savannah River Site

http://sti.srs.gov/fulltext/SRNL-STI-2012-00290.pdf

EM Engineering & Technology: Groundwater and Soils Remediation Program

http://www.hanford.gov/files.cfm/HAB_RAP_PresentationEM-20_010809.pdf

Independent Review of the X-701B Groundwater Remedy, Portsmouth, Ohio: Technical Evaluation and Recommendations

http://www.ports-ssab.energy.gov/Member%20Resources/Portsmouth%20Site%20Information/09-04-701B.pdf

Oxygen's Promise for Groundwater Cleanup a Step Closer with SRNL Research

http://www.osti.gov/home/rssposts/oxygen%E2%80%99s-promise-groundwater-cleanup-step-closer-srnl-research

Again, thank you for your recommendation. We appreciate the level of interest and support that your committee provides. If you have any questions, you can contact me or contact Angelia Adams, of my staff, at (803) 952-8593.

Sincerely,

for David C. Moody
Manager

AMIES-14-006

cc:
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