

## Department of Energy

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

OCT 0 2 2008

The Honorable A. J. Eggenberger Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, NW Suite 700 Washington DC 20004-2901

Dear Mr. Chairman,

SUBJECT: Status Update and Path Forward for Salt Waste Processing Facility (SWPF)

The Salt Waste Processing Facility (SWPF) is an integral part of the U.S. Department of Energy's (DOE) plan to reduce the risks associated with the continued storage of High Level Waste at the Savannah River Site. The SWPF project has essentially completed facility design, completed site preparation activities, started limited construction and initiated long lead procurements.

Over the last several years, our staffs have worked together to ensure the adequacy of SWPF design. Some of the topics addressed include the performance category of the facility, geotechnical investigation and structural evaluation. The results of our efforts are summarized as follows:

- The performance category was changed from PC-2 to PC-3.
- A detailed geotechnical investigation was completed. This investigation included field work, lab work and static and dynamic analysis, which developed conservative soil settlement profiles. Ultimately, the basemat was thickened from 5' to 8' to provide a bounding design solution.
- DOE structural experts and external independent structural experts have performed structural reviews of the facility in support of project design by Parsons. These experts reviewed the Finite Element Model (FEM), and the Soil Structure Interaction (SSI) Calculation, as well as facility design calculations. DOE determined that the FEM and SSI calculations for the entire Central Processing Area (CPA) are adequate. Subsequent to DOE's determination that the structural design is adequate, members of your staff communicated via e-mail to my Federal Project Director the DNFSB's assessment is that "the structural design of the CPA facility to elevation 116' is adequate and supports concrete placement to that elevation."

Based on completed design activities, reviews completed to date, and the resolution of identified DNFSB issues, DOE considers the SWPF design sufficiently mature to proceed with construction beginning with the placement of concrete.

We appreciate the DNFSB staff's effort in providing valuable feedback and look forward to continuing this type of productive professional working relationship.

Honorable A. J. Eggenberger

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Should you have any questions, please contact me or Zack Smith, SWPF Federal Project Director at (803) 641-8982.

Sincerely,

Jeffrey M. Allison Manager

SWPF-08-404

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