

Department of Energy

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

MAR 2 4 2009

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: Your Letter Regarding Salt Waste Processing Facility dated February 10, 2009

Construction and operation of the Salt Waste Processing Facility (SWPF) continues to be an integral part of the Department's mission to safely immobilize Savannah River Site tank waste. We appreciate the Board's confirmation that our overall safety strategy is sound and that there are no significant safety issues that would preclude construction. We are continuing to work constructively with your staff to address each of the outstanding project items summarized in your letter. Based on our current knowledge and technical evaluations of these items, none represent a significant risk to the design, construction or operation of SWPF. We will continue to aggressively pursue closure of all the outstanding items. Some of our actions to close these items have been discussed with your staff and are summarized below:

- Summary Structural Report: The draft Summary Structural Report was provided to your staff on February 12, 2009 and the project intends to issue this report on or before April 30, 2009.
- Flammable Gas Generation: Thermolysis testing has been completed at both Savannah River National and Idaho National Laboratories; this testing confirms that thermolysis is not an issue for SWPF. Air Pulse Agitator heat input will be considered in the development of safety basis controls, as needed, for flammable gas removal.
- DOE-STD-1066: The project has determined that the current protective strategy for the high-efficiency particulate air filters (i.e., ember screens and a manual water spray system) is appropriate for the SWPF. The project is currently documenting the adequacy of this protective strategy relative to DOE-STD-1066.
- Hydrogen in Piping: The consequences from postulated un-mitigated pipe explosions are low due to minimal material-at-risk and the location of piping in unoccupied areas. However, to minimize potential impacts to facility availability, the project has focused on preventing these events by design. In cases where design solutions are not feasible (if any), operational controls will be implemented.

Mr. Eggenberger

MAR 2 1 2009

- Post-seismic Operator Actions: The number of required post-seismic operator actions is small and the times available to perform them are long. However, to further enhance the post-seismic safety posture, the performance category of several components will be upgraded. The safety basis will document the post seismic stabilization program. As this program is developed, we will share our approach with your staff.
- Ignition Sources: The SWPF design is robust and minimizes ignition sources within the process cells. Additional details will be provided in the safety basis and design documents.
- Seismic Event Equipment Interactions: Seismic II/I evaluations have been completed for major components as part of the structural analysis; the remaining secondary items will be evaluated consistent with construction progress.

We agree that the interactions between our staffs have been constructive and we look forward to continuing this dialogue. DOE remains committed to safely constructing, commissioning, and operating this key risk reduction facility on schedule.

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

Sincerely, mall:

['] Jeffrey M. Allison Manager

SWPF-09-188

cc: Kenneth G. Picha, HQ, EM-60, FORS Dae Chung, HQ, EM-60, FORS Mark Whitaker, HQ, HS-1.1 2