

Joyce L. Connery, Chair
Thomas A. Summers, Vice Chair
Jessie H. Roberson

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Washington, DC 20004-2901



Mr. William I. White
Senior Advisor
Office of Environmental Management
US Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Mr. White:

The Defense Nuclear Facilities Safety Board (Board) closely followed the design and construction of the Salt Waste Processing Facility (SWPF), which will play a key role in the tank farm closure mission at the Savannah River Site. SWPF commenced processing radioactive waste from tank farms at the end of 2020. Consequently, the Board's staff reviewed the safety of operations and maintenance activities as the first year of operations neared completion and identified areas that deserve continued attention by the new operating contractor, Savannah River Mission Completion. As SWPF is one of several new or planned waste processing facilities across the complex, sharing information, best practices, and lessons learned complex-wide is essential to improve the Department of Energy's safety posture.

Effective implementation of technical safety requirements (TSR) is fundamental to safe operations. In late 2021, SWPF experienced a number of TSR implementation-related issues and took substantive corrective actions to address these. The short-term compensatory measures taken and long-term corrective actions identified by facility personnel appear appropriate and should drive necessary improvements. The effectiveness and sustainability of these corrective actions will depend on rigorous implementation and consistent focus by the operating contractor and federal oversight team. The Board encourages the Department of Energy to evaluate whether underlying causes could affect performance in other aspects of safety basis implementation.

The Board's staff also identified a vulnerability in the use of an operator aid known as a "run plan." Run plans are documents intended to provide operating parameters for waste processing and are not subject to unreviewed safety question review. In practice, run plans can provide more complex operating guidance and therefore should be reviewed for potential safety basis impacts. SWPF personnel committed to formalizing the nuclear safety review of run plan documents. This is a good practice that should be highlighted for other facilities that may use similar documents.

Finally, during this review, the Board's staff observed minor instances of behaviors that may indicate that facility operations personnel are growing more tolerant of abnormal or unexpected conditions. While some issues can be attributed to new processes, thorough operator rounds and rigorous efforts to address abnormal conditions, even minor ones such as small system leaks or procedure inconsistencies, are essential to ensure the long-term safe operation of this facility.

The Board's staff has already provided details regarding the items above to the contractor and federal staff teams. The Board noted effective cooperation between its staff and the Department of Energy's team at the Savannah River Site during this review as a good example of a shared commitment to safe operations. The Board is encouraged by recent facility personnel efforts to improve operations and will continue to monitor the safety of operations at SWPF and across the complex.

Sincerely,

Joyce L. Connery
Chair

c: The Honorable Jennifer Granholm
Mr. Michael Budney
Mr. Joe Olencz

AFFIRMATION OF BOARD VOTING RECORD

SUBJECT: SWPF Operations

Doc Control#: 2022-100-0027

The Board acted on the above document on 07/12/2022. The document was Approved.

The votes were recorded as:

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIPATING	COMMENT	DATE
Joyce L. Connery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	07/11/2022
Thomas Summers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	07/08/2022
Jessie H. Roberson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	07/08/2022

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Board Members.

Linda Plezo-Hunter

Executive Secretary to the Board

Attachments:

1. Voting Summary
2. Board Member Vote Sheets

DEFENSE NUCLEAR FACILITIES SAFETY BOARD
NOTATIONAL VOTE RESPONSE SHEET

FROM: Joyce L. Connery

SUBJECT: SWPF Operations

Doc Control#: 2022-100-0027

DATE: 07/11/2022

VOTE: Approved

COMMENTS:

None

Joyce L. Connery

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

NOTATIONAL VOTE RESPONSE SHEET

FROM: Thomas Summers

SUBJECT: SWPF Operations

Doc Control#: 2022-100-0027

DATE: 07/08/2022

VOTE: Approved

COMMENTS:

None

Thomas Summers

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

NOTATIONAL VOTE RESPONSE SHEET

FROM: Jessie H. Roberson

SUBJECT: SWPF Operations

Doc Control#: 2022-100-0027

DATE: 07/08/2022

VOTE: Approved

Member voted by email.

COMMENTS:

None

Jessie H. Roberson