

Joyce L. Connery, Chair
Thomas A. Summers, Vice Chair

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Washington, DC 20004-2901



The Honorable Jennifer M. Granholm
Secretary of Energy
US Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Secretary Granholm:

In its letter dated August 3, 2023, the Defense Nuclear Facilities Safety Board (Board) identified concerns with facility worker safety at the Savannah River Plutonium Processing Facility project. Specifically, the Board is concerned that project personnel assert facility workers can use their senses to detect accidents such as a glovebox spill or fire and exit the area before receiving significant radiological exposure. Using this assumption of worker self-protection, project personnel avoided designating safety significant controls, such as gloveboxes, glovebox ventilation, continuous air monitors, and glovebox fire controls, that other DOE plutonium processing facilities have traditionally designated. As a result, the Board requested “a written report and briefing in 45 days providing DOE’s [Department of Energy] position on the adequacy of the safety strategy for facility worker protection, focusing on impacts to long-lead procurements, such as glovebox systems.” The Board received an interim response from DOE on September 25, 2023. In that letter, DOE stated it would “further respond” to the Board’s request “when a path forward has been determined,” but did not specify a timeframe for its completed response.

DOE’s interim response highlights the completion of a project review by the National Nuclear Security Administration’s Associate Administrator for Environment, Safety, and Health (NA-ESH). NA-ESH’s conclusions are largely consistent with the Board’s safety concerns. For example, the NA-ESH report (dated September 7, 2023) found that project personnel over-relied on the expectation that facility workers would take self-protective actions to avoid significant radiological exposures from postulated hazards. The report also found that project personnel too often selected mitigative controls over available preventive controls for hazard scenarios, which is not consistent with the hierarchy of controls in DOE Standard 1189-2016, *Integration of Safety into the Design Process*.

On October 25, 2023, the DOE Office of Environment, Health, Safety, and Security issued a memorandum with interpretations of DOE requirements for developing the project’s safety basis. The memorandum indicates concerns with the selection of controls for worker safety. It states that “it is especially concerning that this type of protection strategy [facility worker self-protection] is being discussed during the design phase of a new DOE nuclear facility

when the development and crediting of controls are attainable and will be integral to the long-term safe operations of the facility.”

As discussed in the Board’s August 3, 2023, letter, the DOE Office of Enterprise Assessments also documented concerns with facility worker protection at the Savannah River Plutonium Processing Facility (report issued in December 2021). Now that three of DOE’s applicable nuclear safety organizations have documented safety concerns with the project’s safety approach, the Board is renewing its request for a final response. Therefore, pursuant to 42 United States Code §2286b(d), the Board requests a written response and briefing to its letter dated August 3, 2023, by January 19, 2024.

Sincerely,

Joyce L. Connery
Chair

c: Mr. Joe Olencz

RESIDENT INSPECTOR FACTUAL ACCURACY REVIEW		
SUBJECT:		
AUTHOR:		DATE SENT:
AFFECTED SITES:		
Resident Inspectors	Date	Comments
Hanford		
Los Alamos		
Oak Ridge		
Pantex		
Savannah River		

*** CC the ATD for Field Operations on Resident Inspector factual accuracy review emails.

Guidance for Completing Resident Inspector Factual Accuracy Review

Type of Correspondence	Mandatory RI Review	Optional RI Review
Draft and Final Recommendations and Board Technical Reports involving DOE-wide policy	All RIs	n/a
Draft and Final Recommendations and Board Technical Reports involving issues at specific sites	All RIs at those sites	RIs at other sites
Other correspondence involving DOE-wide policy	At least one RI at each site	Other RIs
Other correspondence involving issues at specific sites	At least one RI at those sites	Other RIs

RECORDS CONCURRENCE FORM

NUMBER:		SUBJECT:	
OFFICE / RESPONSIBLE SUPERVISOR:			

TECHNICAL CONCURRENCE
TECHNICAL DIRECTOR
NAME:
SIGNATURE/DATE:

GENERAL MANAGER CONCURRENCE
GENERAL MANAGER
NAME:
SIGNATURE/DATE:

LEGAL CONCURRENCE
GENERAL COUNSEL
NAME:
SIGNATURE/DATE:

DEPUTY TECHNICAL DIRECTOR
NAME:
SIGNATURE/DATE:

EXECUTIVE DIRECTOR OF OPERATIONS
NAME:
SIGNATURE/DATE:

TRANSFER FILE NAME		
SECRETARY/AUTHOR NAMES		
RELEASED FOR DISTRIBUTION ON		

AFFIRMATION OF BOARD VOTING RECORD

SUBJECT: SRPPF Facility Worker Protection

Doc Control#: 2024-100-0002

The Board acted on the above document on 11/17/2023. The document was Approved.

The votes were recorded as:

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIPATING	COMMENT	DATE
Joyce L. Connery	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11/16/2023
Thomas Summers	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11/17/2023

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

Shelby Qualls

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: SRPPF Facility Worker Protection

Doc Control#: 2024-100-0002

DATE: 11/16/2023

VOTE: Approved

Member voted by email.

COMMENTS:

None

Joyce L. Connery

Shelby Qualls (CTR)

From: Joyce Connery
Sent: Thursday, November 16, 2023 4:21 PM
To: Shelby Qualls (CTR); Board Members
Cc: Katherine Herrera; Joseph Gilman; ExSec
Subject: Re: Notational Vote: 2024-100-002, SRPPF Facility Worker Protection - BLUE FOLDER (CUI)

I consent

From: Shelby Qualls (CTR) <ShelbyQ@dnfsb.gov>
Sent: Thursday, November 16, 2023 4:19:50 PM
To: Board Members <BoardMembers@dnfsb.gov>
Cc: Katherine Herrera <KatherineH@dnfsb.gov>; Joseph Gilman <JosephG@dnfsb.gov>; ExSec <ExSec@dnfsb.gov>
Subject: Notational Vote: 2024-100-002, SRPPF Facility Worker Protection - BLUE FOLDER (CUI)

CUI-CUI-CUI//PRIV

This email is an electronic record of Notational Vote. Voting ballot will follow shortly. Also, accepting electronic votes.

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

FROM: Members of the Board
SUBJECT: SRPPF Facility Worker Protection

DOC#2024-100-002

Approved _____
Disapproved _____
Abstain _____
Recusal – Not Participating _____

COMMENTS:

Below _____
Attached _____
None _____

Shelby Qualls | Executive Secretary | RiVidium, Inc.
Office of the Executive Director of Operations | Defense Nuclear Facilities Safety Board
625 Indiana Ave. NW, Suite 700, Washington, DC 20004
Tel: 202.694.7090
email: shelbyq@dnfsb.gov

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

NOTATIONAL VOTE RESPONSE SHEET

FROM: Thomas Summers

SUBJECT: SRPPF Facility Worker Protection

Doc Control#: 2024-100-0002

DATE: 11/17/2023

VOTE: Approved

Member voted by email.

COMMENTS:

None

Thomas Summers

Shelby Qualls (CTR)

From: Thomas Summers
Sent: Friday, November 17, 2023 6:41 AM
To: Shelby Qualls (CTR); ExSec
Subject: Re: Notational Vote: 2024-100-002, SRPPF Facility Worker Protection - BLUE FOLDER (CUI)

Approved. No comments. V/r TAS

From: Shelby Qualls (CTR) <ShelbyQ@dnfsb.gov>
Sent: Thursday, November 16, 2023 4:19 PM
To: Board Members <BoardMembers@dnfsb.gov>
Cc: Katherine Herrera <KatherineH@dnfsb.gov>; Joseph Gilman <JosephG@dnfsb.gov>; ExSec <ExSec@dnfsb.gov>
Subject: Notational Vote: 2024-100-002, SRPPF Facility Worker Protection - BLUE FOLDER (CUI)

CUI-CUI-CUI//PRIV

This email is an electronic record of Notational Vote. Voting ballot will follow shortly. Also, accepting electronic votes.

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

FROM: Members of the Board
SUBJECT: SRPPF Facility Worker Protection

DOC#2024-100-002

Approved _____
Disapproved _____
Abstain _____
Recusal – Not Participating _____

COMMENTS:

Below _____
Attached _____
None _____

Shelby Qualls | Executive Secretary | RiVidium, Inc.
Office of the Executive Director of Operations | Defense Nuclear Facilities Safety Board
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