



# Defense Nuclear Facilities Safety Board

Community Outreach Event

February 24, 2026



# Establishment of the DNFSB

- US nuclear weapons are produced in the Department of Energy's (DOE) defense nuclear facilities for the Department of Defense. Defense nuclear facilities also stabilize (i.e., clean up) radioactive wastes from previous nuclear weapons manufacturing.
- Late 1980s:
  - High profile nuclear accidents (e.g., Chernobyl).
  - Congress questioned DOE's ability to manage the complex safely and wanted a body of experts to report unbiased and timely information on the state of the DOE defense nuclear complex.
  - Spearheaded by Senator John Glenn.
- Congress established the Defense Nuclear Facilities Safety Board (DNFSB) and charged it with identifying potential issues of adequate protection at defense nuclear facilities, advising the Secretary of Energy of those issues, and informing the public.



Plutonium oxide produced at the Plutonium Facility at Los Alamos National Laboratory.

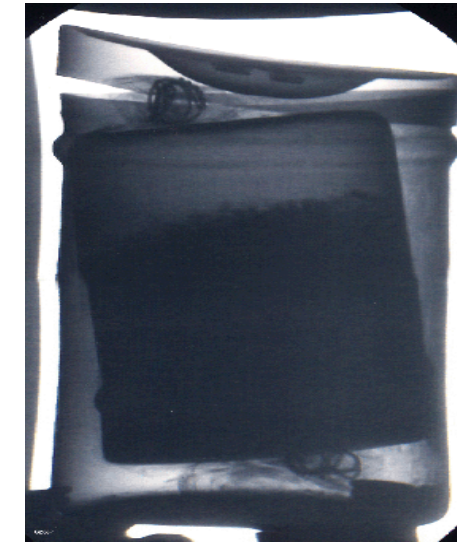


Retrieval of liquid high-level radioactive waste at the Hanford Tank Farms



# Who is DNFSB?

- By statute, DNFSB Members are required to be “respected experts in the field of nuclear safety with a demonstrated competence and knowledge relevant to the independent investigative and oversight functions of the Board.”
- DNFSB has a highly-trained technical staff—Nearly all have master’s degrees, and many have doctorates in fields like nuclear, chemical, mechanical, earthquake, and fire protection engineering.
  - Many have a decade or more of experience in the nuclear weapons complex and cannot be easily replaced.
  - DNFSB staffing is statutorily capped at 130 FTE.
- DNFSB has a 35-year history of providing independent analysis, advice, and recommendations to the Secretary of Energy to ensure the health and safety of the public and workers at defense nuclear facilities.



Breached nuclear waste container due to plutonium reaction



Temporary disposal of nuclear waste at Idaho National Laboratory



Spent fuel pool at Hanford K Reactor



# DNFSB Overview

*“The mission of the Board shall be to provide independent analysis, advice, and recommendations to the Secretary of Energy to inform the Secretary, in the role of the Secretary as operator and regulator of the defense nuclear facilities of the Department of Energy, in providing adequate protection of public health and safety at such defense nuclear facilities, including with respect to the health and safety of employees and contractors at such facilities.” - Atomic Energy Act of 1954, as amended*

## Current Board Members



**Dr. Patricia L. Lee**  
Member

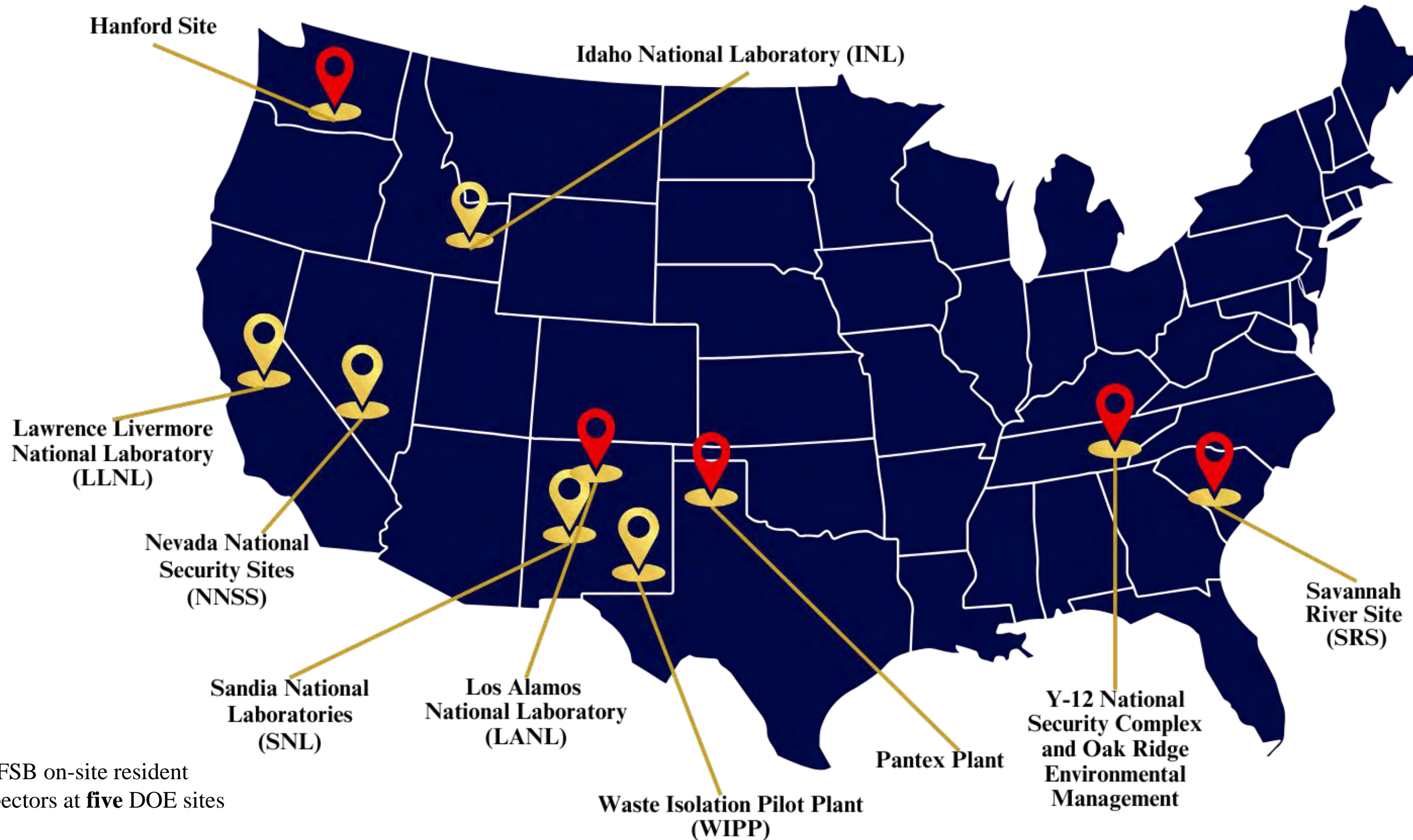


**4 Vacancies**

- On October 18, 2025, Vice Chair Summers’ term expired.
- For the first time in its 36-year history, the Board has one member and no Chair or Vice-Chair.
- However, certain authorities have been delegated to the longest serving remaining Board member.
- The DNFSB will continue operating and focusing on protecting public and worker health and safety at the DOE’s defense nuclear facilities.



# DOE Sites with Defense Nuclear Facilities





# Scope of DNFSB Safety Oversight

- Complex, high-hazard operations involving the assembly or disassembly of nuclear weapons, or the operation of nuclear facilities related to DOE's national defense mission.
- Remediation of nuclear wastes and legacy facilities from more than 80 years of DOE defense nuclear operations.
- Design and construction of new DOE defense nuclear facilities.
- Aging and deteriorating mission critical infrastructure at DOE defense nuclear facilities/sites.
- Adequacy of DOE safety standards related to design, construction, operation, and decommissioning of defense nuclear facilities.



Typical glovebox



WIPP transuranic waste



# DNFSB Statutory Authorities



Hanford cesium and strontium capsules

- Issue formal recommendations to the Secretary of Energy about adequate protection of public health and safety.
- Levy reporting requirements on the Secretary of Energy.
- Conduct open or closed hearings and meetings, including the power to subpoena witnesses, if needed.
- Conduct investigations and special studies.

DOE is required by law to grant the Board *“prompt and unfettered access to such facilities, personnel, and information as the Board considers necessary to carry out its responsibilities.”*



Transuranic waste shipment approaching WIPP



# DNFSB's Tools to Voice Nuclear Safety

**RECOMMENDATIONS**

**REPORTING  
REQUIREMENTS**

**ADVICE LETTERS  
AND REPORTS**

**DAILY/WEEKLY  
STAFF-TO-STAFF  
DISCUSSIONS**

**Recommendations:** Require DOE to either:

- (a) fix issues that challenge the adequate protection of the health and safety of the public and workers at defense nuclear facilities or
- (b) inform Congress why it rejected the DNFSB's Recommendation.

**Reporting Requirements:** DOE must provide its analyses or actions it plans to take (or has taken) to remediate safety issues at defense nuclear facilities.

**Advice Letters and Reports:** Advise DOE on questionable practices, potential root causes, or problems impacting multiple defense nuclear facilities.

**Staff-To-Staff Discussions:** Promote staff-to-staff fixes to identified nuclear safety issues as early as possible. DOE and its contractors often appreciate DNFSB staff feedback and the opportunity to address issues at the lowest level.



# Savannah River Site (SRS)

## Functions:

- DOE's Environmental Management (EM) agency has oversight of the management, stabilization and disposition of nuclear materials; management, disposition of solid, liquid and transuranic wastes; spent fuel management; and environmental remediation and clean up.
- The National Nuclear Security Administration (NNSA) has oversight of the defense program's tritium supply and nuclear stockpile maintenance, nuclear nonproliferation, foreign fuel receipts, surplus plutonium disposition and pit production missions.
- On October 1, 2024, DOE EM transitioned landlord responsibilities to NNSA.

## Issues:

- Potentially inadequate protection of the public health and safety in the event of an energetic accident at the Savannah River Tritium Enterprise facilities.
- Potentially inadequate safety strategy and controls in the conceptual design for facility worker protection at the Savannah River Plutonium Processing Facility.
- Improper designation of specific administrative controls and inappropriate classification of vital fire protection equipment in the Savannah River National Laboratory.





# Savannah River Tritium Enterprise (SRTE)

**Safety Issue:** Inadequate protection of the public health and safety in the event of an energetic accident at SRTE.

- In Recommendation 2019-2, *Safety of the Savannah River Tritium Facilities* dated [June 11, 2019](#), the Board concluded there was an issue of adequate protection of public health and safety in the event of an energetic accident, such as an earthquake or large fire at the Tritium Facilities .
- The Board recommended that DOE implement near-term compensatory measures to improve the safety of the tritium facilities, identify and implement long-term actions and controls to prevent or mitigate the hazards, and evaluate upgrades to safety management programs to ensure that the site can effectively respond and treat potential victims from an energetic accident at SRTE.
- DOE rejected Recommendation 2019-2 on [January 3, 2020](#), stating their conclusion that DOE/NNSA are providing adequate protection to the public and the workers at SRTE, and that their on-going actions at the Tritium Facilities to improve the safety posture addressed the Board's concerns discussed in the Recommendation.
- The Board continues to follow the progress of NNSA initiatives to reduce risk and improve safety of the Tritium Facilities. In a letter dated [October 4, 2023](#), the Board established an annual reporting requirement on the progress of facility and system upgrades and the impacts of safety risk reduction efforts.





# Savannah River Plutonium Processing Facility (SRPPF)

## **Safety Issue:** Inadequate safety strategy and controls in the conceptual design at SRPPF.

- In a letter dated [August 3, 2023](#), the Board communicated that a staff review of the SRPPF's conceptual design had identified safety observations on systems, such as gloveboxes that should be addressed in the preliminary design.
- In a letter dated [November 28, 2023](#), the Board communicated their concerns with SRPPF's reliance on worker self-protection to avoid designation of additional safety controls (gloveboxes, glovebox ventilation, continuous air monitors, glovebox fire controls).
- DOE sent a letter on [January 17, 2024](#), responding to the Board's 2023 letters, stating DOE/NNSA are employing multiple interfacing systems and mechanisms as safety controls for protecting facility workers at SRPPF and that they concur with the Board's concerns regarding the previous control strategy. NNSA committed to ensuring that all gloveboxes with plutonium metal are credited as safety controls.
- In a letter dated [November 13, 2024](#), the Board identified concerns with the coverage of the criticality accident alarm system at SRPPF.
- In a letter dated [May 21, 2025](#), the Board identified that three DOE safety organizations had identified safety concerns with the facility worker safety approach for this project along with the Board's documented safety concerns in<sup>11</sup> previous correspondence in 2022 and 2023.



# Savannah River National Laboratory (SRNL)

**Safety Issue:** Improper designation of specific administrative controls and inappropriate classification of vital fire protection equipment in SRNL's safety basis.

- In a letter dated [April 5, 2023](#), the Board provided its review of the SRNL safety basis and communicated that the plan and schedule to resolve persistent safety deficiencies remained unclear. The Board requested a report on planned actions and timeline to address the improper designation of specific administrative controls and inappropriate classification of fire protection equipment.
- DOE responded on [August 23, 2023](#), stating that the department acknowledges the conclusions of the Board's staff and are fundamentally aligned with the concerns. DOE reported that the operating contractor had incorporated changes that address three of the concerns identified by the board in an upcoming revision to their safety basis.
- DOE also reported other planned improvements to augment fire safety and the NFPA-compliant fire water supply system with compensatory measures to assure the system can perform its safety function when called upon.
- The DNFSB continues to engage regarding SRNL's implementation of improved safety controls.



# Impact: Improving Nuclear Safety at an Unused Facility at SRS Containing a Very Highly Radioactive Form of Plutonium

Since issuance of the DNFSB's [Recommendation 2012-1, Savannah River Site Building 235-F Safety.](#)



DOE eliminated all sources of electrical power from the facility, which substantially reduces the likelihood of a fire.

DOE removed much of the plutonium material that was stuck in shielded hot cells.



# DNFSB Activities Related to SRS

## Recent Board letters to DOE:

- [July 7, 2025](#): Defense Waste Processing Facility Conduct of Operations.
- [May 28, 2025](#): Closure of Board Recommendation 2012-1, Savannah River Site Building 235-F Safety.

## Active Safety Reviews:

- SRTE safety basis, collocated-worker dose reduction, emergency preparedness, and tritide deposition velocity reviews.
- SRPPF Preliminary Documented Safety Analysis review.
- SRNL safety basis implementation review.
- Tank Farms safety basis implementation review.
- SRS Training review at SRTE and L-Area.
- SRS Work Planning and Control review.
- Field implementation of technical standards at SRS.



SRPPF project ongoing construction of the sand filter



# Addressing Safety Allegations from Workers and the Public

*The DNFSB makes it easy for anyone to [submit safety allegations in a confidential manner](#). The DNFSB reviews all safety concerns within its jurisdiction promptly and dispositions them in accordance with veracity and safety significance.*

In 2024, the Board received a safety allegation regarding alleged deficiencies in nuclear weapon safety component manufacturing, certification, and quality assurance processes, with implications for the safety of nuclear explosive operations at the Pantex Plant.

The Board voted to initiate a formal safety investigation into these matters and transmitted its report to DOE on [October 17, 2025](#). The Board identified several safety improvements that would help bolster assurance that nuclear weapon safety components are fabricated, procured, and installed in a manner commensurate with their safety function.





# Questions?



Emergency Preparedness Exercise at the Savannah River Tritium Enterprise

[www.dnfsb.gov](http://www.dnfsb.gov)

**DNFSB recommendations, letters, reports, site weekly reports, impacts, and more.**