



Savannah River Site Watch

Fire at SRS!

Was the fire on October 28 at the US Department of Energy's Savannah River National Lab foreseen (by the DNFSB) and avoidable? The alarming fire must be investigated and the subsequent report, with non-DOE review, must be made public.

See important information below (with URLs) related to problems with fire-suppression system and procedures at the Savannah River National Lab (SRNL), as reviewed in 2020, 2023 and in Defense Nuclear Facilities Safety Board (DNFSB) reports in 2025 and 2026 by the DNFSB (www.dnfsb.gov), an independent federal agency charged under law with reviewing safety issues at US Department of Energy sites.

The Board pointed out problems with the SRNL fire suppression system, including sprinklers, and stated in a [weekly report dated February 13, 2026](#) that DOE had not fully implemented necessary upgrades to the "Fire Suppression System" as identified by the Board. The Board also reported in a shocking [November 14, 2025 weekly report](#) that a spark was seen during renovation of a SRNL laboratory! - "SRNL is renovating a laboratory room which involves removing gloveboxes, fume hoods, wall panels, piping services, and electrical power. While carpenters were removing a wall panel, they saw a spark and immediately stopped work and notified the control room."

Savannah River Site Watch - News Release

Columbia, SC

www.srswatch.org

For Immediate Release

October 31, 2026

Contact: Tom Clements, Director, SRS Watch, tomclements329@cs.com, tel 803-834-3084

Columbia, SC -- The reported fire in a facility at the U.S. Department of Energy's Savannah River Site (SRS) in South Carolina has raised concern about operations at the sprawling nuclear weapons facility due to potential health and safety impacts to workers and reported release of radiation. A quick review of archived documents posted on line by an independent oversight agency, the Defense Nuclear Facilities Safety Board (DNFSB), reveals that fire-suppression issues at the Savannah River National Laboratory (SRNL) have been raised by the Board for more than 6 years.

The 310-square-mile SRS, established by the Atomic Energy Commission (AEC) in the early-1950s, produced plutonium for U.S. nuclear warheads and currently processes all tritium that goes into all U.S. nuclear weapons. SRS has a growing nuclear weapons role and the DOE's National Nuclear Security Administration (NNSA) is currently retrofitting an existing facility at SRS to produce plutonium "pits" - the core of nuclear weapons - a role SRS had never had. DOE revealed on October 19, 2026 that the cost to prepare the never-used plutonium fuel (MOX) building at SRS to make pits would be an estimated \$23.5 billion (which excludes the \$5-8 billion sunk into construction of the MOX building). NNSA has said that the schedule for completion of the pit facility has slipped to 2038, raising doubts the project will be completed.

The DNFSB documents - see excerpts below, with URLs - show that the Board was on top of potential fire-suppression and administrative problems at SRNL but that DOE has not fully responded in early 2026 to issues identified and recommendations made by the board in 2023. As DOE and SRS have not revealed in which lab the fire took place - and what radioactive materials were in the lab - nor how it started nor how it was brought under control, it is at the point not possible to determine if DOE's failure to fully implement fire-suppression recommendations made by the SRNL contractor in 2023, in response to the DNFSB's recommendations, contributed to the initiation or apparent spread of the fire.

In a February 23, 2026 DNFSB "activity report" (aka "weekly report") by the Board's resident inspectors at SRS, it was revealed that some identified fire-suppression deficiencies had not been properly addressed and had not been incorporated into the "safety basis," which would identify potential hazards and address them both administratively and with actual fire-suppression control systems. The report points out lingering problems and it is unknown if these were later corrected:

*After a DNFSB staff review identified several concerns with the approved SRNL safety basis at the time, [the Board transmitted a letter to DOE-EM on April 5, 2023](#). The letter detailed the Board's concerns with SRNL's safety- significant **fire suppression system (FSS)**, which utilizes many key components classified as general service. [DOE-EM's response in its August 23, 2023, letter](#) committed to conducting a backfit analysis of the FSS (which was completed in 2024) and to evaluating incorporating any additional measures identified from the backfit analysis into the FY25 update to the safety basis, or as soon as practicable. **While some aspects of the Board's letter have been addressed in the current revision of the safety basis, many of the items identified in the backfit analysis of the FSS remain open and have not been incorporated into the current or upcoming revision to the safety basis.** After discussions between the resident inspector (RI), field office, and contractor, the contractor has entered the items identified in the Board and DOE-EM's letters into its issue-tracking system to ensure actions are appropriately identified and tracked to completion.*

Tom Clements, Director of SRS Watch, a public-interest group based in Columbia, SC that monitors nuclear safety issues at SRS, stated the following on learning of the fire, its harm to workers and the apparent release of radioactive materials into the environment:

"DOE must immediately conduct a review of what caused the fire, what impacts it has to public health and safety and to the environment, and what will be done to prevent such fires in the future. Given that fire protection at SRNL has failed, a halt to SRNL technical operations until fire-response protocols can be reviewed and improvements implemented is called for. In particular, DOE must reveal if it had at the time of the fire fully responded to recommendations by the Defense Nuclear Facilities Board concerning fire-suppression problems identified at the Savannah River National Lab and state when new steps will be taken to upgrade fire protection. That SRS is now pursuing a facility that would produce weapons' pits from plutonium, which can burn when exposed to air, it does not bode well for

the pit plant when an unanticipated fire can't be controlled in a single SRS lab facility. A rigorous review by both DOE and the DNFSB of the status of current fire protection at SRS facilities and fire protection being planned for the SRS pit plant is called for.

###

Notes - Defense Nuclear Facilities Safety Board (DNFSB) documents:

DNFSB letter of April 5, 2023 to DOE about concerns with Savannah River National lab fire suppression system:

<https://www.dnfsb.gov/sites/default/files/document/27981/Savannah%20River%20National%20Laboratory%20Safety%20Basis%20%5B2023-100-017%5D.pdf>

"The Defense Nuclear Facilities Safety Board (Board) completed a review of the Savannah River National Laboratory (SRNL) safety basis. As SRNL leadership takes steps to expand programmatic activities under the Department of Energy's (DOE) new laboratory-focused management and operations contract, the Board is concerned that several long-standing safety basis deficiencies remain unresolved."

"Savannah River National Laboratory Safety Basis Review"

"Summary. The staff of the Defense Nuclear Facilities Safety Board (Board) reviewed Revision 2 (Rev. 2) of the Savannah River National Laboratory (SRNL) documented safety analysis (DSA) and technical safety requirements (TSR). While Department of Energy (DOE) approval of Rev. 2 represented an important step in modernizing the SRNL safety basis, several safety issues threaten to undermine the long-term reliability and effectiveness of credited SRNL controls and fail to satisfy DOE's nuclear safety requirements.

The deficiencies of primary concern involve improper designation of specific administrative controls (SAC) and inappropriate functional classification of key fire protection equipment. The Board identified similar issues in past correspondence to the Secretary of Energy. Following interactions with the Board's staff, DOE and laboratory personnel determined they will take several important corrective actions, particularly related to SAC designations; however, additional management attention is necessary to ensure these persistent issues are resolved in upcoming SRNL safety basis revisions."

"At SRNL, failure of external supply piping or fire pumps would result in the safety significant sprinklers losing the ability to perform their required safety function; however, supply piping and fire pumps are classified as general service rather than safety significant, contrary to DOE requirements. [The Board communicated similar concerns in correspondence to the Secretary of Energy, dated August 7, 2020.](#)"

"Expeditious risk reduction was warranted when legacy fire water supply equipment was exhibiting the potential for further degradation or outright failure. Nevertheless, now that the A-Area Firewater Repair/Replacement Project is complete, ensuring newly installed equipment is classified appropriately is essential to safeguarding the long-term reliability and effectiveness of SRNL's fire water supply system. Requirements codified in DOE Standard 3009 govern the assignment of functional classifications, even for systems that fully comply with industry (e.g.,

NFPA) codes and standards."

"Conclusion. DOE approval of Rev. 2 of the SRNL DSA and TSRs represented an important step in upgrading and modernizing the laboratory's safety basis. Despite this progress, several significant deficiencies that were identified by the Board in prior correspondence to the Secretary of Energy remain unresolved. Specifically, issues involving the designation of SACs and the functional classification of key fire protection equipment threaten to undermine the long-term reliability and effectiveness of vital administrative and engineered controls credited in the SRNL safety basis. While site personnel have initiated action to re-evaluate relevant SAC determinations, additional management attention is needed to ensure persistent safety issues are successfully addressed in upcoming safety basis revisions."

DOE response of August 23, 2023 to the DNFSB's letter concerning fire suppression:

<https://www.dnfsb.gov/sites/default/files/document/27981/Savannah%20River%20National%20Laboratory%20Safety%20Basis%20%5B2023-100-017%5D.pdf>

"DOE acknowledges the conclusions of your staff's report, and we are fundamentally aligned with your concerns. As you noted, DOE and its contractors have been working for several years to upgrade and modernize the SRNL safety basis."

"Summary

A draft Revision 3 of the Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR) has been provided to the Department of Energy (DOE) by the Savannah River National Laboratory (SRNL) operating contractor. It incorporates changes that address three of the concerns identified in the Defense Nuclear Facilities Safety Board (DNFSB) report, "Savannah River National Laboratory Safety Basis Review," regarding designation of Specific Administrative Controls (SACs), Safety Significant Boundary of the Fire Water Supply and Sprinkler System, and Material at Risk (MAR) Undergoing "Temporary Confinement Changes." Other planned improvements will augment fire safety and the National Fire Protection Association (NFPA)-compliant Fire Water Supply System with compensatory measures to assure the supported safety-significant sprinkler system can perform its safety function when called upon. The fourth concern described in the Board's staff report involving Safety Integrity Level Determinations for Safety Instrumented Systems is being addressed and will be incorporated in the annual update of the DSA/TSR scheduled for fiscal year (FY) 2025."

DNFSB letter to DOE, Staff Report: "Review of the Savannah River Site Fire Protection Program," August 7, 2020

<https://www.dnfsb.gov/sites/default/files/document/21581/SRS%20Fire%20Protection%20Program%20%5B2020-100-052%5D.pdf>

"We have completed a review of the Savannah River Site's fire protection program. The Board concludes that the expected elements of the program have been developed, implemented,

and are functioning adequately. However, we identified five areas related to the program for which the Department of Energy should consider improvements. Details are discussed in the enclosed report, which is provided for your information and use."

"Conclusion. The Board's staff team reviewed five primary subjects related to the SRS fire protection program: program management; fire hazards analyses; fire prevention; inspection, testing, and maintenance of fire protection systems; and emergency response. Based on the information reviewed within these subjects and SRS's answers to lines of inquiry, the Board's staff team concludes that the expected major parts of an acceptable fire protection program are present and functioning as required in the SRS fire protection program. However, the Board's staff team identified several safety items associated with the program."

"The new A-Area water supply is not completely safety-significant and does not have sufficient TSR surveillances, which may prevent the safety-significant SRNL automatic sprinkler system from meeting its safety function. The Board's staff team concludes that an exemption or equivalency to DOE Order 420.1C or DOE Standard 1066 would be appropriate, as the system does not meet these standards. The Board's staff team also concludes that additional TSR surveillances would be appropriate to protect the SRNL sprinkler system safety function, including surveillances of at least one fire pump and the freeze protection system for aboveground piping."

&

Recent DNFSB weekly reports for SRS mentioning fire suppression issues at SRNL & issues with radiological release response:

<https://www.dnfsb.gov/sites/default/files/2026-10/Savannah%20River%20Week%20Ending%20August%2028%202026.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 28, 2026

Savannah River Site Resident Inspectors Activity Report for Week Ending August 28, 2026

Savannah River National Laboratory (SRNL): DOE-EM had committed to conducting a backfit analysis of their fire suppression system and to evaluating the incorporation of additional measures into their safety basis in response to a [Board letter from April 5, 2023](#) (see [2/13/2026 report](#)). SRNL engaged an independent contractor to review the NFPA [*National Fire Protection Association*] requirements and SRNL's

Technical Safety Requirements (TSRs) and develop recommendations. The independent analysis highlighted items that, while performed to meet NFPA requirements, are not included in the TSR. They recommended that SRNL update their safety basis and work with SRNS (who performs the maintenance) to update existing procedures to include those as TSR surveillance requirements. They also recommended, due to the age of the outside underground (OSUG) distribution system and the leaks that continue to occur, that SRNL either replace all the underground fire-water distribution piping over a period of time and perform system leak-rate verification and a hydrostatic test as a TSR surveillance until all piping has been replaced, or install a new fire-water tank, fire pumps, and underground fire-water distribution network dedicated to Building 773-A (which relies on the safety-significant fire-water supply and

sprinkler system). SRNL engineering developed and transmitted a white paper to evaluate and recommend a path forward. Recommendations included establishing regular preventive maintenance or functional testing to ensure isolation capability in order to mitigate potential impacts of failures in the OSUG, enhanced monitoring by expanding the existing system-health reporting, and ensuring appropriate spares are maintained. The engineering white paper did not commit to the recommendations from the independent analysis, but SRNL is still evaluating including additional controls in a future safety basis update.

<https://www.dnfsb.gov/sites/default/files/2026-04/Savannah%20River%20Week%20Ending%20March%206%202026.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 6, 2026

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending March 6, 2026

Savannah River National Laboratory (SRNL): The facility is in the process of performing renovation work in the SRNL glass shop. During a walkdown of the shop prompted by an employee request for access to work in the area, the shift operations manager and fire protection engineer discovered that several ceiling tiles had been removed, **rendering the safety significant fire suppression system inoperable**, and that the associated limiting condition of operation (LCO) had not been entered. The facility took immediate action and entered the LCO, completed all required actions, and a formal timeout was taken on the construction activities. During the issue investigation meeting, personnel noted that the work planner and subject matter experts did not identify any required impairments during planning activities, as they had assumed that there were no sprinkler heads installed above the ceiling tiles. However, they did not review drawings to confirm their assumption, nor was the fire protection engineer included in the work planning and approval process. DOE-SR facility representatives and the resident inspector (RI) noted that not all involved personnel attended the issue investigation meeting. The contractor has interviewed the absent personnel and plans to incorporate their statements into the apparent cause analysis (ACA) in lieu of holding a second meeting. The RI also noted that the ACA process and implementation of corrective actions can take several weeks and suggested considering compensatory measures to ensure that all approved work packages have had the proper engineering review and that all safety system impacts have been properly identified prior to authorizing the work to proceed.

The site's emergency preparedness organization and SRNL personnel conducted an exercise that simulated a radiological release with multiple injuries and contaminated personnel. The contractor and DOE will document their evaluation of the exercise in an after-action report.

DNFSB fire suppression system issues identified in 2023 in SRNL "remain open":

<https://www.dnfsb.gov/sites/default/files/2026-03/Savannah%20River%20Week%20Ending%20February%2013%202026.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 13, 2026

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending February 13, 2026

Savannah River National Laboratory (SRNL): After a DNFSB staff review identified several concerns with the approved SRNL safety basis at the time, [the Board transmitted a letter to DOE-EM on April 5, 2023](#).

The letter detailed the Board's concerns with SRNL's safety-significant **fire suppression system (FSS)**, which utilizes many key components classified as general service. [DOE-EM's response in its August 23, 2023, letter](#) committed to conducting a backfit analysis of the FSS (which was completed in 2024) and to evaluating incorporating any additional measures identified from the backfit analysis into the FY25 update to the safety basis, or as soon as practicable. **While some aspects of the Board's letter have been addressed in the current revision of the safety basis, many of the items identified in the backfit analysis of the FSS remain open and have not been incorporated into the current or upcoming revision to the safety basis.** After discussions between the resident inspector (RI), field office, and contractor, the contractor has entered the items identified in the Board and DOE-EM's letters into its issue-tracking system to ensure actions are appropriately identified and tracked to completion.

<https://www.dnfsb.gov/sites/default/files/2026-02/Savannah%20River%20Week%20Ending%20December%202019%202025.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 19, 2025

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending December 19, 2025

Savannah River National Laboratory: DOE facilities are required to identify protective actions to minimize emergency-related consequences and maximize life safety and health. For certain radiological emergencies, the facility will direct people to remain indoors and shut down ventilation systems that draw in outside air to minimize exposures. For numerous administrative buildings in A-Area, BSRA relies on personnel in each building to turn off thermostat controls to minimize outside air intake as part of protective actions. The RIs identified that, for some buildings, thermostats were locked to prevent occupants from adjusting temperature and others were located in locked offices and/or inaccessible areas. Additionally, the RIs noted that exhaust fans would remain running independent of thermostat control, which would result in unfiltered outside air being drawn into the building. The RIs also noted that throughout A-Area, there were inconsistent postings showing the location of thermostats, inconsistent instructions provided on the method of shutting down ventilation, and inconsistent knowledge by building occupants as to what their individual responsibilities would be. These issues would reduce the effectiveness of the preplanned protective actions during a radiological emergency. Facility management has directed immediate actions to unlock all thermostats and review all building ventilation configurations while developing long-term corrective actions. The RIs communicated concerns

that actions to secure ventilation were simulated during emergency preparedness drills and exercises in ways that were inadequate to verify personnel's ability to properly implement protective actions in an emergency.

Workers saw a spark while renovating a SRNL lab room:

<https://www.dnfsb.gov/sites/default/files/2025-12/Savannah%20River%20Week%20Ending%20November%2014%202025.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 14, 2025

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending November 14, 2025

Savannah River National Laboratory (SRNL): SRNL is renovating a laboratory room which involves removing gloveboxes, fume hoods, wall panels, piping services, and electrical power. While carpenters were removing a wall panel, they saw a **spark** and immediately stopped work and notified the control room. After initial investigation, facility personnel suspect there may be a pinched sheathed cable that caused the spark. For this activity, there were electrical and civil work packages. The first work package instructed the electrical worker to install a single-point lockout/tagout (L/T) on a circuit in that panel and perform a safe energy state determination. The electrical worker did not perform those steps. The carpenters that subsequently worked on the civil work package assumed that everything electrical was de-energized. The civil work package had a sign-off for verifying that part of the electrical services had been disconnected, but it did not guarantee all of the services were disconnected nor did it discuss needing an L/T. During the issue investigation meeting, personnel also noted that there had been a change in policy such that these sheathed cables were no longer considered safe if exposed and not protected, but this change was not shared widely outside of electrical work groups. In addition, the DOE facility representative noted that both work packages had prior steps that were not filled out. Facility management has paused renovation work in that laboratory room as they develop corrective actions.

<https://www.dnfsb.gov/sites/default/files/2025-12/Savannah%20River%20Week%20Ending%20November%2007%202025.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 7, 2025

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending November 7, 2025

Savannah River National Laboratory (SRNL): SRNL declared a potential inadequacy in the safety analysis for one of their specific administrative controls (SAC). The Conduct of Research and Development SAC requires performing an evaluation or verification of pressurizable closed

research systems and chemical processes to identify and implement controls to prevent or mitigate nuclear material explosion hazards. The DOE safety basis approval authority approved the documented safety analysis (DSA) and technical safety requirements that should identify the hazards and the controls necessary to provide adequate protection for the workers and the public. However, the controls required to protect the facility workers and safety systems from potential explosions from new research systems and processes are not currently specified in the DSA. Additionally, the SAC allows for development of those controls outside of the safety basis approval process. This SAC has not been utilized by the facility, and they have instituted compensatory measures to put the SAC procedure on hold. The facility plans to de-implement the SAC from the current approved safety basis.

<https://www.dnfsb.gov/sites/default/files/2025-11/Savannah%20River%20Week%20Ending%20October%2031%202025.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 31, 2025

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending October 31, 2025

Savannah River National Laboratory (SRNL): While performing a job site review for upcoming work to repair a leaking fire suppression system sprinkler head, a worker raised concerns about the lockout/tagout boundary. They identified that the isolation of the specified pressure sources might be inadequate to ensure a safe energy state. The worker also raised concerns that the approved work package could not be performed as written (i.e., utilizing a ladder) due to the location of the leaking sprinkler head. During initial discussions with facility operations, work group supervision, and safety representatives, they identified an alternate plan to utilize structural beams as the working surface. Site manuals and procedures regarding employee safety require that work at elevated heights above 6 feet be analyzed for fall protection, and that controls to mitigate the hazard be incorporated into approved technical work documents. The approved hazard analysis and work package did not fully evaluate fall protection. The facility has coordinated with rigging to walk down the work area and will revise the work package to address additional safety requirements, as applicable, to ensure the worker is protected against a fall hazard while performing the work.

<https://www.dnfsb.gov/sites/default/files/2025-09/Savannah%20River%20Week%20Ending%20August%2029%202025.pdf>

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 29, 2025

TO: Technical Director

FROM: Savannah River Site Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending August 29, 2025

Savannah River National Laboratory (SRNL): SRNL revised its procedure for

implementation of the compensatory measures for exceeding inventory control limits (see [1/24/2025](#) and [7/25/2025](#) reports). In January, when the facility first identified the Potential Inadequacy in the Safety Analysis (PISA), they implemented compensatory measures and controls, including a requirement to conduct fire patrols of SRNL every four hours. After further analysis, they determined in their Evaluation of the Safety of the Situation (ESS) that the fire patrols were no longer needed. After facility personnel identified additional legacy material that was above de minimis values (i.e., requires tracking of the material) in June, fire patrols were re-instituted. However, this was only established in a standing order and the procedure implementing the compensatory measures for the PISA did not indicate the fire patrols were a safety basis level control as it did for the other compensatory measures. SRNL submitted a revision to the ESS to reinstitute the fire patrols, and they are revising the implementing procedure to include the fire patrols as a safety basis level of control.

The facility continues to work through their extent-of-condition (EOC) review to identify any material that has not been accounted for in their inventory tracking software. For the E-wing shielded cells, maintenance needs to repair the cell crane before they can continue their EOC review in the last two shielded cells. Personnel obtained dose measurements in the F-wing shielded cells to help identify items that might have material at risk and have returned limited functionality of manipulators and trolleys to support nondestructive analysis characterization of suspect items. Upon discovery of the issue, engineering performed a calculation based on actual tracked inventory to determine what margin they had before exceeding their safety analysis. The calculation showed a margin of 60 Pu-239 equivalent curies (PEC) of solid material at risk, and, at this time, their EOC review has identified approximately 5 PEC of material that had not been accounted for. They will have to consider suspect material in other forms as well (e.g., liquid).