



Formal Comments on the Pit Production Programmatic Environmental Impact Statement

July 16, 2026

Ms. Jade Fortiner
NEPA Document Manager
National Nuclear Security Administration
Office of Pit Production Modernization
U.S. Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

By email to PitPEIS@nnsa.doe.gov

Dear Ms. Fortiner:

On behalf of Nuclear Watch New Mexico, we respectfully submit these comments on the draft Pit Production Programmatic Environmental Impact Statement (PEIS). We have decades of experience in the history of Department of Energy (DOE) and National Nuclear Security Administration (NNSA) noncompliance with the National Environmental Policy Act (NEPA) and related litigation. We are one of the co-plaintiffs that compelled NNSA to complete this PEIS. We urge NNSA to be fully compliant with NEPA so that further litigation can be avoided.

We note the irony of this due date, the 81st anniversary of the Trinity Test of the world's first plutonium pit. Only now are some of the New Mexicans that suffered intergenerational harms from the world's first radioactive fallout beginning to receive some compensation.

Our mission statement: Through comprehensive research, public education and effective citizen action, Nuclear Watch New Mexico seeks to promote safety and environmental protection at regional nuclear facilities; mission diversification away from nuclear weapons programs; greater accountability and cleanup in the nation-wide nuclear weapons complex; and consistent U.S. leadership toward a world free of nuclear weapons.

These comments are also available online at <https://nukewatch.org/nwnm-pit-peis-comments-7-16-26/>

Sincerely,

Jay Coghlan, Executive Director
Scott Kovac, Research Director,
Sophia Stroud, Associate Director

Executive Summary

Nuclear Watch New Mexico, Savannah River Site Watch and Tri-Valley CAREs, represented by the South Carolina Environmental Law Project, were co-plaintiffs in the successful lawsuit that compelled NNSA to undertake this Pit Production PEIS. With respect to the scope of this PEIS, a major element should be an honest review by NNSA of its historically deficient and at times downright illegal NEPA compliance history. The usual “we comply with NEPA” pablum will not do. NEPA processes actually result in tangible benefits for both the federal government and the public.

As the U.S. attempts to “modernize” its nuclear arsenal—a plan involving ramping up plutonium pit production that will generate vast amounts of nuclear waste and affect communities across the country—NEPA’s review process is critically needed. Without this review, the U.S. modernization plan will proceed without sufficient oversight and zero public input, leading to a far increased likelihood of preventable accidents, toxic exposure, and costly environmental problems. Fast-tracking complex, high-risk projects under weakened regulations increases the potential for operational failures, contamination events, and long-term policy instability. Gutting NEPA benefits industry and government interests at the expense of public health, environmental sustainability, accountability and the American taxpayer.

We note that NNSA is apparently continuing its arguably illegal NEPA behavior by withholding three critically needed documents from the public during this comment period:

- 1) A new plutonium pit life study by independent scientists known as the JASONs. NNSA claims that potential aging effects drive the need for the immediate production of new pits, thereby ruling out the alternative of reusing some 15,000 existing pits. In contrast, a 2006 JASON pit life study concluded that most pit types have reliable lives of more than 100 years and those that don’t have relatively easy fixes.
- 2) A Department of Energy “Special Study” on NNSA leadership and management of its troubled plutonium pit production program, scheduled for completion in December 2025. That Study is expected to be critical of the new pit production plant at the Savannah River Site (SRS) in South Carolina, which will be the most expensive building in US history (\$30 billion-plus).
- 3) A new “Probabilistic Seismic Hazard Analysis” (PSHA) for the Los Alamos National Laboratory (LANL) that is nearly a decade overdue. A 2007 LANL seismic analysis prompted badly needed seismic upgrades to the Lab’s plutonium pit production facility. NNSA’s April 2026 draft Pit Production PEIS stated that the new PSHA would be completed in early 2026, but it is still not available for public comment.

On July 6, 2026, our lawyers at the South Carolina Environmental Law Project sent a letter to DOE and NNSA demanding the release of the three important documents and an extension of the public comment period of 30 days from their release. There has been no reply.

On July 15, 2026, one day before draft Pit Production PEIS comment period expired, Nuclear Watch New Mexico and the Union of Concerned Scientists (UCS) received the new JASON study *Plutonium Aging: Executive Summary (Unclassified)* in response to our Freedom of Information Act (FOIA) requests. It is just three pages, one title page and two pages of text, both completely redacted. The claimed FOIA exemption is (b)5, which “incorporates the attorney-client privilege, attorney work-product privilege, and deliberative process (or pre-decisional) privilege.” We think this is an outrageous abuse of FOIA given NNSA’s often repeated claims that potential aging concerns drive the \$60 billion+ plutonium pit production. The final Pit Production PEIS must answer this question, what is NNSA hiding by completely redacting *Plutonium Aging: Executive Summary (Unclassified)*?

NNSA’s formal Notice of Intent states that “For analytical purposes, this PEIS will evaluate potential impacts over a 50-year period, through approximately 2075.” This is an unheard range of time, essentially a blank check over time. It’s as if NNSA said to itself, “well if I am legally forced to do this PEIS, I might as well make it for as long as I can get away with.”

One issue that clearly limits what an appropriate time horizon for the Pit Production PEIS should be is the disposal of radioactive transuranic wastes from future pit production. It conflicts with the relatively new New Mexico Environment Department permit for the Waste Isolation Pilot Plant (WIPP) which requires prioritization of LANL’s legacy wastes, not fresh pit production wastes. This will be a probable source of future conflict between the state of New Mexico and NNSA, perhaps even resulting in litigation.

An overarching point is that a 50-year time horizon for continuing plutonium pit production is, in effect, a nuclear weapons forever program, contrary to the 1970 NonProliferation Treaty’s mandate to end the nuclear arms race “at an early date...” The Pit Production PEIS should offer a genuine No Action Alternative or Reduced Operations Alternative that aligns with the 1970 NonProliferation Treaty’s mandate for nuclear disarmament.

The nuclear weapons powers have always used the one-word rationale of “deterrence” to justify their nuclear stockpiles. However, in the case of the United States and the Soviet Union/Russia, “deterrence” is at best only a half truth. The truth is that both countries keep nuclear warfighting capabilities that far exceed mere “deterrence” and could end civilization overnight.

All future pit production is for new-design nuclear weapons that can’t be tested because of the international testing moratorium, which could erode confidence in the stockpile. Or, alternatively, new designs could prompt the U.S. to return to nuclear weapons testing, which would likely have disastrous proliferation consequences. These are serious issues that NNSA must address in the final Pit Production PEIS.

Concerning “deterrence,” the Pentagon explicitly rejects minimal deterrence while “reiterating the need to maintain counterforce capabilities... not rely[ing] on a counter-value or minimum-deterrence approach...” This is why both Russia and the U.S. have 1,000s of nuclear weapons instead of just the few hundred needed for minimal deterrence. Nuclear warfighting creates pressure for endless modifications and/or new designs for the stockpile, which the *2024 Nuclear Employment Strategy* characterizes as “flexible capabilities” and “a wide range of employment

options.” This is what is driving the U.S.’ \$2 trillion nuclear weapons “modernization” program, which in turn is driving expanded plutonium pit production. This fuels an escalating nuclear arms race that imperils us all.

There is another reason why “deterrence” itself is the threat, one that is perhaps the easiest reason to understand. There is a long history of nuclear weapons accidents and near miscalculations when there can only be zero. The control of nuclear weapons must be perfect when, unfortunately, human beings are not. All of these instances may seem to have taken place long ago while operational safety measures have surely improved since then. But there is a new wrinkle - - artificial intelligence. Will AI trump human judgment when human instinct was integral to avoiding nuclear Armageddon in the past? We can’t really know until it is far too late. But the only way to 100% eliminate that threat is to eliminate nuclear weapons.

The draft Pit Production PEIS repeats this hypocritical claim: “NNSA missions are conducted fully consistent with current treaty obligations. The SSMP [Stockpile Stewardship and Management Plan] is fully consistent with and supports the U.S. commitment to the NPT [NonProliferation Treaty]...”

The NNSA ignores the obvious historic fact that the original five nuclear weapons powers, including the United States, have never taken step number one “to pursue negotiations in good faith.” The U.S.’ \$2 trillion “modernization” program directly violates NonProliferation Treaty Article VI, in which expanded plutonium pit production plays a direct role.

For the Pit Production PEIS to claim that it “is fully consistent with and supports the U.S. commitment to the NPT,” it must have an alternative of not expanding nuclear weapons programs. From the beginning, the Pit Production PEIS should comport not only with the NPT’s mandate to disarm nuclear stockpiles, but also with the essential need for the U.S. to lead by example toward ridding the world of weapons of mass destruction. For NNSA to plan ongoing plutonium pit production over the next half century directly contradicts its claim that “The United States takes this commitment [to the NPT] seriously and has emphasized dedication to both the long-term goal of a world without nuclear weapons and the requirement that the United States maintain modern, flexible, and resilient nuclear capabilities that are safe and secure.”

This is particularly true given that all future plutonium pit production is not to maintain the safety and reliability of the existing nuclear weapons stockpile. Instead, it is all for new design nuclear weapons that can’t be tested, thereby arguably lowering confidence in the stockpile. Or, alternatively, it could prompt the U.S. to resume testing, which would likely have serious proliferation impacts given that other nations would surely follow. Indeed, plutonium pit production for new-design nuclear weapons that leads to testing could destroy what’s left of the NonProliferation Treaty to begin with.

The silence is deafening concerning the Treaty on the Prohibition of Nuclear Weapons. That ban treaty, like chemical and biological weapons ban treaties that the U.S. helped to promulgate, has now been in effect for 5 years and ratified by 75 countries, approaching most nations and climbing.

NNSA and the Labs frequently use the issue of the potential aging of plutonium pits as a rationale for expanded production. In 2006 the JASONs concluded in that most plutonium pit types have reliable lifetimes of at least 100 years and those that don't have relatively easy fixes. In 2012 the Lawrence Livermore National Laboratory added to the reassuring data about pit aging by announcing that plutonium is "aging gracefully."

We specifically incorporate by reference into the Pit Production PEIS a study by Dr. Dylan Spaulding, senior scientist at the Union of Concerned Scientists, that comprehensively addresses plutonium pit aging. See *Plutonium Pit Production: The Risks and Costs of US Plans to Build New Nuclear Weapons* at <https://doi.org/10.47923/2025.15875>

On the day before day the draft Pit Production PEIS comment period expired, Nuclear Watch New Mexico and the Union of Concerned Scientists (UCS) received the new JASON study *Plutonium Aging: Executive Summary (Unclassified)* in response to our Freedom of Information Act (FOIA) requests to NNSA. It is just three pages, one title page and two pages of text, both completely redacted. The claimed FOIA exemption is (b)5, which "incorporates the attorney-client privilege, attorney work-product privilege, and deliberative process (or pre-decisional) privilege." We think this is an outrageous abuse of FOIA given NNSA's often repeated claims that potential aging concerns drive the \$60 billion+ plutonium pit production program. The final Pit Production PEIS must answer this question, what is NNSA hiding by completely redacting the *Plutonium Aging: Executive Summary (Unclassified)*?

The U.S. already has more than 15,000 plutonium pits in storage. The Pit Production PEIS should thoroughly analyze the reuse of existing pits as a viable alternative to the manufacturing of new pits. We note the existence of the Special Nuclear Material Component Requalification Facility at the Pantex Plant, which has boasted how pit reuse is much less expensive and environmentally damaging than the production of new pits.

The NNSA has announced it has delayed its surplus plutonium disposition program which is reflective of NNSA's prioritization of nuclear weapons production above all. The final Pit Production PEIS needs to analyze the adverse impacts expanded nuclear weapons production will have on both national and international nonproliferation programs.

All involved sites must be programmatically considered in the Pit Production PEIS. This includes the Kansas City National Security Complex (KCNSC), the Pantex Plant and the Waste Isolation Pilot Plant (WIPP). The draft Pit Production PEIS claims that "these sites are not directly involved in pit production activities." In fact, all these sites except WIPP are slated to receive increased FY 2027 funding for so-called "Plutonium Modernization." That money is direct irrefutable monetary evidence of their programmatic involvement in plutonium pit production. NNSA was forced to complete the Pit Production PEIS by our lawsuit. NNSA restricted analysis in the draft PEIS to just the two main production sites. Therefore, NNSA willfully fails to complete a programmatic EIS and satisfy our lawsuit.

NNSA assumes that the Waste Isolation Pilot Plant (WIPP) will be prioritized for disposal of pit production radioactive wastes. In contrast, the New Mexico State WIPP permit requires prioritization of LANL cleanup wastes and that DOE start looking for a new out-of-state dump.

WIPP is already oversubscribed for all the radioactive wastes that the Department of Energy wants to dump there. NNSA needs to fully analyze and project plutonium pit waste disposal for the next 50 years. The Pit Production PEIS must analyze the possibility of not having WIPP available for disposal of some or all of the radioactive transuranic (TRU) wastes from plutonium pit production.

DOE must analyze the environmental impacts of the New Mexico Environment Department's "agency-initiated modifications."

According to the Government Accountability Office, the NNSA has no credible cost estimates for expanded plutonium pit production, its most complex and expansive program ever. Why? This is particularly egregious when DOE and the NNSA (and its predecessors) have been on the GAO's "High Risk List" for project mismanagement and waste of taxpayers' dollars since 1991. Indications are that just preparing facilities for plutonium pit production at LANL will cost \$25 billion and more than \$30 billion at SRS, making the Savannah River Plutonium Processing Facility the most expensive building in U.S. history. None of this includes actual production nor all related costs by any means. It does not include related programmatic costs at the Lawrence Livermore National Laboratory, Nevada National Security Site, the Kansas City National Security Complex and the Pantex Plant.

DOE should release its "Special Study" on NNSA leadership and management of its troubled plutonium pit production program, scheduled for completion in December 2025. That Study is expected to be critical of the new pit production plant at the Savannah River Site (SRS) in South Carolina, which will be the most expensive building in US history (\$30 billion-plus). DOE has not released this Special Study despite requests by Members of Congress and public Freedom of Information Act requests. It may have direct bearing on the Multi-Site and Single Alternatives in the draft Pit Production PEIS as to whether plutonium pit production is feasible and/or affordable at SRS at all. The final Pit Production PEIS needs to answer the question, what is DOE and NNSA hiding by covering up this document?

In September 2023 the New Mexico Environment Department (NMED) issued a draft order to DOE to comprehensively clean up an old radioactive and toxic waste dump known as Area C. In June 2025 DOE Environmental Management Los Alamos notified NMED that Area C was "associated with active Facility operations and will be Deferred from further corrective action."

MDA C's proximity to pit production facilities, specifically LANL's main plutonium facility "PF-4," is not in dispute. However, Nuclear Watch New Mexico contends that simple proximity is not enough to justify indefinite deferral of cleanup. DOE and NNSA need to justify in the Pit Production PEIS exactly why Area C is "associated with active Facility operations."

LANL's chronic history of nuclear safety incidences needs analysis and resolution before expanding plutonium pit production. The long track record of chronic nuclear criticality incidences at LANL has become publicly known primarily through the Defense Nuclear Facilities Safety Board (DNFSB). We contend that the final Pit Production PEIS must analyze the occupational and public risks of repeated, chronic nuclear criticality safety incidences at

LANL and how to resolve them. DOE and NNSA must stop trying to limit the Safety Board's access to nuclear facilities.

While NNSA uses the word "safety" hundreds of times in the draft Pit Production PEIS to satisfy NEPA requirements, the actual execution of the 80+ pit-per-year requirement will compromise safety throughout the nuclear weapons complex. In our view, the single best way that NNSA could promote safety is to grant the Defense Nuclear Facilities Safety Board unfettered access to its nuclear facilities when and where the Safety Board chooses, as its enabling legislation already mandates. Therefore, the final Pit Production PEIS should analyze how to improve safety across the plutonium pit production program by fully cooperating with the DNFSB, rather than constantly trying to restrict its access.

The draft PEIS health analysis generally evaluates a maximally exposed individual and the collective population within 50 miles. These are inadequate radiological risk methods. The final PEIS should expand the accident impact radius beyond 50 miles to account for worst-case scenarios such as facility fires. Additionally, the NNSA must account for the cumulative impacts of other chemicals in the environment. The final PEIS should include analysis of vulnerable populations such as children, women, low-income, Indigenous, and rural communities not represented in traditional exposure limits.

The analysis of material and waste transportation in the draft PEIS presumes a complex transportation network in which retired pits and other plutonium material are shipped primarily from Pantex to LANL or SRS as feedstock. The draft PEIS lacks adequate analysis of emergency preparedness outside DOE facilities, and of the capabilities of local emergency responders, state agencies, Tribal governments, or rural communities that could encounter an accident involving radiological materials. The draft PEIS does not at all evaluate how repeated shipments could affect infrastructure wear or cumulative transportation burdens in communities along frequently used corridors. The draft PEIS lacks publicly available routing information. While the exact routes are classified for security reasons, the PEIS could have presented and analyzed updated publicly known transportation corridors, state highway systems, interstate routes, and generalized shipment patterns without compromising national security. The final PEIS must synthesize that unclassified information and evaluate which routes and regions would experience the greatest concentration of shipments over the program's lifetime.

Environmental justice language is completely absent in the draft Pit Production PEIS. The PEIS does not answer central environmental justice questions of who receives the economic benefits, who bears the health and environmental risks, and how does that connect and interact with existing disproportionate risk and historical contamination?

NNSA must have current seismic studies at all relevant sites incorporated into the Pit Production PEIS, especially for the Los Alamos and Lawrence Livermore National Laboratories. The Defense Nuclear Facilities Safety Board has confirmed that a new LANL Probabilistic Seismic Hazard Analysis has been completed for several months. However, it has not been publicly released for consideration during the Pit Production PEIS comment period, which we believe is in further violation of the National Environmental Policy Act.

A major independent study has been recently released that indicates that NNSA's risk assessments for expanded plutonium pit production are way too low. NNSA's calculations in NEPA documents for potential doses and latent cancer fatalities are always ridiculously low. In the event of a "Facility-wide seismic event and fire in PF-4" the calculated probability for the "Offsite Population" (defined as the ~420,000 people living within the 50-mile radius of LANL) of a latent cancer fatality is 4.1×10^{-6} ,¹ or roughly a 1 in 244,000 chance that an individual would develop a fatal cancer.

This clearly does not square with *Consequence Analysis of Major Fires at Plutonium Pit Production Facilities*. Nor does it square with past Defense Nuclear Facilities Safety Board analyses that have calculated lethal occupational and quite harmful public doses. The final Pit Production PEIS must take into account all relevant factors, for example variable meteorological conditions, particle sizes and historic data from past fires, and honestly assess potential doses and latent cancer fatalities.

NNSA must prepare a new site-wide environmental impact statement (SWEIS) for the Pantex Plant. It's been nearly 30 years since the last complete Pantex SWEIS. Since that time, in addition to radically increased nuclear weapons assembly and decreased dismantlement missions, there has been a "1,000 year" flood in 2011 and a wildfire in 2023 that forced a temporary evacuation of the Plant. It's been way too long to continue relying upon a 30-year old SWEIS when clearly there is new information and substantially changed circumstances.

All reference documents must be readily available, including key documents currently being withheld (specifically the new JASON pit life study, DOE's "Special Study" on its troubled plutonium pit production program and the Los Alamos Lab's new Probabilistic Seismic Hazard Analysis).

¹ Draft Pit Production PEIS, NNSA, April 2026, p. S-28.

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National Environmental Policy Act Compliance

It took citizen litigation and a federal court ruling that NNSA had violated the National Environmental Policy Act (NEPA) to compel the agency to complete this Pit Production PEIS. Nor is this a one-time experience. In fact, it has taken decades of citizen enforcement to make DOE and NNSA comply with the National Environmental Policy Act.

This started in 1990 when the Natural Resources Defense Council won a court order that required DOE to complete programmatic environmental impact statements on the post-Cold War reconfiguration of its nuclear weapons complex and vitally needed environmental restoration and waste management. DOE ignored that court order until 1995 when in pre-litigation negotiations over an environmental impact statement for the Dual-Axis Radiographic Hydrodynamic Testing Facility at the Los Alamos National Laboratory (LANL) it agreed to a Stockpile Stewardship and Management PEIS. To this day, DOE has never completed an Environmental Restoration PEIS for the most expensive cleanup program in human history. In a related lawsuit, it did settle that claim in large part by agreeing to a Central Internet Database that would track radioactive wastes across the nuclear weapons complex. But DOE never completed it, again violating the federal court order.

Nuclear Watch New Mexico, SRS Watch and Tri-Valley CAREs, represented by the South Carolina Environmental Law Project, were co-plaintiffs in the successful lawsuit that compelled NNSA to undertake this Pit Production PEIS. With respect to the scope of this PEIS, a major element should be an honest review by NNSA of its historically deficient and at times downright illegal NEPA compliance history. The usual “we comply with NEPA” pabulum will not do.

As an added matter, NNSA should make clear how it will continue to comply with NEPA and the manner in which it will do so. This is a particularly apt question given the Trump Administration’s gutting of NEPA, first with the rescission of Council on Environmental Quality NEPA implementing regulations followed by DOE’s Revision of National Environmental Policy Act Implementing Procedures.¹

Of great interest to us is DOE Secretary Chris Wright’s June 30 press release in which he stated:

“President Trump promised to break the permitting logjam, and he is delivering,” said **Energy Secretary Chris Wright**. “America can and will build big things again, but we must cut the red tape that has brought American energy innovation to a standstill and end this era of permitting paralysis. These reforms replace outdated rules with clear deadlines, restore agency authority, and put us back on the path to energy dominance, job creation, and commonsense action. Build, baby, build!”²

With respect to this Pit Production PEIS, it was NNSA’s conscious and intentional avoidance of NEPA - and the subsequent involvement of the federal court due to such avoidance - that has

¹ <https://www.govinfo.gov/content/pkg/FR-2025-07-03/pdf/2025-12383.pdf>

² *Energy Secretary Announces Updated NEPA Procedures to End Permitting Paralysis and Unleash American Energy*, June 30, 2025, <https://www.energy.gov/articles/energy-secretary-announces-updated-nepa-procedures-end-permitting-paralysis-and-unleash>

slowed or impacted NNSA's pit production plans. Prompt compliance with NEPA in May 2018, when the dual-track pit-production plan was first announced by DOE & DoD, could have expeditiously addressed the claim that NEPA delays DOE projects. In fact, beginning in October 2018, we activist groups sent five formal letters to NNSA making very clear our view that a PEIS was required by NEPA, to which we never got a response.

NNSA could have easily completed a PEIS within that timeframe. A DOE order mandating prompt NEPA compliance is needed rather than this effort to gut NEPA through this poorly written and confusing interim rule. It is trying to kill the messenger instead of the message. Moreover, the DOE Secretary's sound bite of "Build, Baby, Build" clearly smacks of predetermination which is illegal under NEPA statutes. NNSA needs to explain the DOE Secretary's statement and clarify how the agency will comply both with the letter and spirit of NEPA in this Pit Production PEIS.

Moreover, instead of hindering and hamstringing the government and American innovation, NEPA processes result in tangible benefits for both the federal government and the public. Our favorite example is public comment on the lack of analysis of wildfire threat in a draft 1999 LANL Site-Wide Environmental Impact Statement (SWEIS). In response, the final LANL SWEIS included a detailed hypothetical wildfire that became all too real a half year later during the April/May 2000 Cerro Grande Fire. That hypothetical scenario aided Lab leadership in their decision to order mandatory evacuation of all but essential personnel. Mitigation provisions in the final LANL SWEIS included fire prevention measures that helped to keep the wildfire a half-mile away from above ground plutonium-contaminated transuranic wastes stored at the Lab's Area G, which could have been catastrophic had their drums ruptured due to high heat.

Even LANL recognized that public comment helped to avert potential catastrophe, writing:

"It is a story of an EIS process, of helpful public comments, of a timely response ... then a great fire, called Cerro Grande, that proves the value of outsiders' ideas... When the Cerro Grande Fire swept down from the mountains this spring, these extra defensive steps, taken in response to the public comments, paid for themselves many times over. The savings were in the form of the harm to facilities that was reduced or avoided and reduced risk to the public that might have resulted."
<https://hwbdocuments.env.nm.gov/Los%20Alamos%20National%20Labs/General/13435.pdf>

This lesson on the value of public comment under NEPA can obviously be extended to this Pit Production PEIS. NNSA would be wise to really take to heart that NEPA compliance is more than just checking off a procedural box. It does result in tangible benefits for itself and the American taxpayer.

As the U.S. attempts to "modernize" its nuclear arsenal—a plan involving ramping up plutonium pit production that will generate vast amounts of nuclear waste and affect communities across the country—NEPA's review process is critically needed. Without this review, the U.S. modernization plan would proceed without sufficient oversight and zero public input, leading to a far increased likelihood of preventable accidents, toxic exposure, and costly environmental problems. Fast-tracking complex, high-risk projects under weakened regulations increases the potential for operational failures, contamination events, and long-term policy instability. Gutting

NEPA benefits industry and government interests at the expense of public health, environmental sustainability, accountability and the American taxpayer.

NNSA should also make clear that the PEIS operates under NEPA requirements prior to their gutting by the Trump Administration. This is a potentially important legal matter as our settlement with NNSA mandating the Pit Production PEIS is prior to Trump's inauguration and hence is "grandfathered" in.

Related, we note that NNSA is apparently continuing its arguably illegal NEPA behavior by withholding three critically needed documents from the public during the comment period. In our view, release of those documents would lead to much more informed citizen comment and therefore perhaps better NNSA decisions. Specifically, these three documents are:

- 1) A new plutonium pit life study by independent scientists known as the JASONs. NNSA claims that potential aging effects drive the need for the immediate production of new pits, thereby ruling out the alternative of reusing some 15,000 existing pits. In contrast, a 2006 JASON pit life study concluded that most pit types have reliable lives of more than 100 years and those that don't have relatively easy fixes³ (the average pit age is now ~43). We believe that NNSA has been withholding an unclassified summary of the new JASON pit life study since the end of 2025. NNSA has not released it despite requests by Members of Congress and public Freedom of Information Act requests.
- 2) A Department of Energy "Special Study" on NNSA leadership and management of its troubled plutonium pit production program, scheduled for completion in December 2025.⁴ That Study is expected to be critical of the new pit production plant at the Savannah River Site (SRS) in South Carolina, which will be the most expensive building in US history (\$30 billion-plus). DOE has not released this Special Study despite requests by Members of Congress and public Freedom of Information Act requests.
- 3) A new "Probabilistic Seismic Hazard Analysis" (PSHA) for the Los Alamos National Laboratory (LANL) that is nearly a decade overdue.⁵ A 2007 LANL seismic analysis prompted badly needed seismic upgrades to the Lab's plutonium pit production facility. NNSA's April 2026 draft Pit Production PEIS stated that the new PSHA would be completed in early 2026,⁶ but it is still not available for public comment.

³ Pit Life Study, JASON, 2006, <https://nukewatch.org/wp-content/uploads/2023/05/pit.pdf>

⁴ See "Special Study of the National Nuclear Security Administration's (NNSA's) Leadership and Management of the Plutonium Pit Mission," ordered by DOE Deputy Secretary James Danly on August 11, 2025, <https://nukewatch.org/wp-content/uploads/2026/01/DOE-Special-Study-NNSA-Leadership-Mgmt-Plutonium-Pit-Production-Mission-Ltr-11Aug2025.pdf>

⁵ The Defense Nuclear Facilities Safety Board confirmed its completion in its LANL Resident Inspectors Activity Report for Week Ending May 22, 2026, DNFSB, <https://www.dnfsb.gov/sites/default/files/2026-06/Los%20Alamos%20Week%20Ending%20May%2022%202026.pdf>. Concerning its relevance, the DNFSB noted that, "The [LANL] contractor plans to incorporate the results of the new PSHA into site engineering and safety-basis documents" including plutonium pit production facilities.

⁶ Draft Pit Production PEIS, NNSA, April 2026, p. 3-5, <https://www.energy.gov/nepa/articles/doeis-0573-draft-environmental-impact-statement-april-2026>

NNSA's draft PEIS states "This PEIS process will ensure NEPA compliance for production of plutonium pits in support of these requirements; the plan for which is outlined in the SSMP [Stockpile Stewardship and Management Plan]." ⁷ Clearly the PEIS process is not by itself ensuring NNSA's compliance with NEPA. On July 6, 2026, our lawyers in our successful Pit Production PEIS lawsuit, the South Carolina Environmental Law Project (SCELP), sent a letter to DOE and NNSA demanding the release of the three important documents and an extension of the public comment period of 30 days from their release (see SCELP's letter of demand as Exhibit A).

To quote from that letter of demand:

"As you may be aware, a federal judge found that NNSA had violated NEPA by not authoring a PEIS to address pit production to begin with. NNSA would further violate NEPA were it to fail to consider and address this information in the current PEIS. **"An agency's hard look [under NEPA] should include neither researching in a cursory manner nor sweeping negative evidence under the rug."** Nat'l Audubon Society v. Dep't of Navy, 422 F.3d 174, 194 (4th Cir. 2005). **NEPA also requires that the public have access to information directly relevant to the draft PEIS during the public comment period.** See e.g., Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349, 109 S. Ct. 1835, 1845, 104 L.Ed.2nd 351 (1989) ("Publication of an EIS, both in draft and final form, also serves a larger informational role. It gives the public the assurance that the agency 'has indeed considered environmental concerns in its decisionmaking process,' [] and perhaps more significantly, provides a springboard for public comment") (citations omitted)."

Since we are submitting these formal comments at the end of the designated time period and NNSA has still not produced these documents, it appears that NNSA continues to willfully violate NEPA, which we warn may have future consequences.

Update July 15, 2026, one day before draft Pit Production PEIS comment period expires: Nuclear Watch New Mexico and the Union of Concerned Scientists (UCS) received the Plutonium Aging: Executive Summary (Unclassified) in response to our Freedom of Information Act (FOIA) requests to the National Nuclear Security Administration (NNSA).⁸

It is just three pages, one title page and two pages of text, both completely redacted. The claimed FOIA exemption is (b)5, which "incorporates the attorney-client privilege, attorney work-product privilege, and deliberative process (or pre-decisional) privilege." We think this is an outrageous abuse of FOIA given NNSA's often repeated claims that potential aging concerns drive the \$60 billion+ plutonium pit production program and the Pit Production PEIS comment period expires tomorrow. In contrast, a JASON 2006 Pit Life study's executive summary concluded that most pit types last at least 100 years and those that don't have easy fixes.⁹ (Average plutonium pit age is now ~43).

⁷ Ibid., p. 1-2.

⁸ Redacted *Plutonium Aging: Executive Summary (Unclassified)*, <https://ucs-documents.s3.us-east-1.amazonaws.com/nuclear-weapons/JASON-Plutonium-Aging-Executive-Summary-Unclassified-Redacted.pdf>

⁹ *Pit Lifetimes*, JASON, November 2006, www.nukewatch.org/facts/nwd/JASON_ReportPuAging.pdf
This JASON study came about because Nuclear Watch New Mexico, knowing of the earlier *Remanufacture* JASON report, suggested to then-Senator Jeff Bingaman that a new JASON pit lifetime study would be

The FY 2019 Senate Energy and Water Development Committee report (S.R. 115-258) mandated a new JASON study that should:

“...include recommendations of the study for improving the knowledge, understanding, and application of the fundamental and applied sciences related to the study of plutonium aging and pit lifetimes, an estimate of minimum and likely life-times for pits in current warheads, and the feasibility of reusing pits in modified nuclear weapons. The report shall be submitted in unclassified form but may include a classified annex.”¹⁰

The universal presumption is that an unclassified summary will be released and made publicly available. The JASON 2006 Pit Life study’s executive summary was released and made fully available to the public. A follow-on JASON’s 2019 “Letter Report” was released and made fully available to the public.¹¹ Senator Elizabeth Warren and Rep. John Garamendi have unsuccessfully demanded release of the new pit life study.¹² A July 6 letter of demand by Nuclear Watch’s lawyers at the South Carolina Environmental Law Project remains unanswered.¹³ Nuclear Watch New Mexico’s and the Union of Concerned Scientists’ requests for expedited FOIA processing precisely because of the Pit Production PEIS public comment period was denied. Instead, we get this completely redacted version the day before the comment period expires on July 16, which ironically is the 81st anniversary of the Trinity Test of the world’s first plutonium pit.

Nuclear Watch New Mexico believes this is an unlawful attempt to further violate NEPA. We remind NNSA that “An agency’s hard look should include neither researching in a cursory manner nor sweeping negative evidence under the rug.”¹⁴

The final Pit Production PEIS must answer this question, what is NNSA hiding by completely redacting the Plutonium Aging: Executive Summary (Unclassified)?

The Pit Production PEIS’ 50-year time horizon is untenable

NNSA’s formal Notice of Intent states that “For analytical purposes, this PEIS will evaluate potential impacts over a 50-year period, through approximately 2075.” This is an unheard range of time, essentially a blank check over time. It’s as if NNSA said to itself, “well if I am legally forced to do this PEIS, I might as well make it stay in effect for as long as I can get away with.”

appropriate. He then successfully passed that requirement through an amendment to the 2004 Defense Authorization Act.

¹⁰ Senate Report 115-258, ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, 2019, page 104, <https://www.congress.gov/115/crpt/srpt258/CRPT-115srpt258.pdf>

¹¹ Letter Report to the NNSA, JASON, November 13, 2019, but not transmitted by NNSA to Congress until April 6, 2020, <https://irp.fas.org/agency/dod/jason/pit-aging.pdf>

¹² Joint Senator Warren- Rep. John Garamendi letter to DOE secretary, December 16, 2025, https://www.warren.senate.gov/wp-content/uploads/media/doc/letter_to_doe_nnsa_re_pit_production_mismanagement.pdf

¹³ SCEL P’s letter of demand to NNSA is available at <https://nukewatch.org/demand-letter-for-pit-peis-critical-documents-and-extension-of-public-comment-period>

¹⁴ *Nat’l Audubon Society v. Dep’t of Navy*, 422 F.3d 174, 194 (4th Cir. 2005).

Fifty years is simply not a practical time period, and its range needs to be reduced in the Pit Production PEIS. The January 2025 LANL SWEIS offers good precedence with a range of 15 years. We can't even predict with full confidence what happens next year, but 50 years is simply untenable. In addition, we remind NNSA of its requirement to conduct "Supplement Analyses" every 5 years as to whether programmatic NEPA documents need to be reviewed or not. Needless to say, we would take a dim view if 25 years from now Supplement Analyses of this Pit Production PEIS continued to say that a new PEIS was not needed.

One particular issue that clearly limits what an appropriate time horizon for the Pit Production PEIS should be is the disposal of radioactive transuranic wastes from future pit production. NNSA has stated on record:

"The combined TRU waste (1,151 m³) generated [from pit production] over 50 years would be 57,550 m³, which would account for 53 percent of the projected available capacity at WIPP [the Waste Isolation Pilot Plant]. In addition, use of WIPP capacity for national security missions such as pit production would be given priority in the allocation." ¹⁵

But this conflicts with the relatively new New Mexico Environment Department permit for WIPP which requires prioritization of LANL's legacy wastes, not freshly generated wastes from plutonium pit production. This will likely be a source of future conflict between the state of New Mexico and NNSA, perhaps even resulting in litigation.

The WIPP permit also requires DOE to annually report on its search for a new out-of-state WIPP replacement (which will be politically controversial). In sum, NNSA cannot count on WIPP to be available until ~2075 as the stated Pit Production PEIS's 50-year time horizon implies. It also assumes that WIPP is not shut down in the event of an accident, contrary to what occurred on Valentine's Day 2014. That incident of a ruptured radioactive waste barrel caused by LANL incompetence contaminated 21 workers and shut the facility down for just short of 3 years, costing the American taxpayer at least \$2 billion to reopen.

As an obvious comment, the Pit Production PEIS must fully discuss and analyze the future disposal of all forms of wastes resulting from plutonium pit production, and especially as it pertains to the Waste Isolation Pilot Plant.

An overarching point is that a 50 year time horizon for continuing plutonium pit production is, in effect, a nuclear weapons forever program, contrary to the 1970 NonProliferation Treaty's mandate to end the nuclear arms race "at an early date..." The U.S. Constitution itself enshrines treaties as the "supreme law of the land." The recent Review Conference for the NonProliferation Treaty (NPT) failed for the third consecutive time over a span of 15 years to make any progress whatsoever towards nuclear disarmament. In fact, we are going backwards with the massive "modernization" programs to keep nuclear weapons forever, in which

¹⁵ Final Supplement Analysis of the Complex Transformation Supplemental PEIS, NNSA, December 2019, p. 65, <https://www.energy.gov/sites/default/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>

plutonium pit production is key. The final Pit Production PEIS should analyze how pit production planned for the next 50 years could have a detrimental effect upon the nonproliferation regime under the NPT instead of blithely claiming that NNSA programs comply with it. [For more see the section below on the NonProliferation Treaty.]

A Genuine No Action Alternative

NNSA's draft Pit Production PEIS defines the No Action Alternative as:

At LANL, NNSA would continue to implement the decision announced in the amended LANL ROD (85 FR 54550, September 2, 2020), to produce 30 ppy at LANL with surge capability to produce up to 80 ppy. This decision was reaffirmed in the ROD based on the 2026 Final LANL SWEIS (NNSA 2026b).

At SRS, NNSA will continue to implement the 2020 SRS ROD (85 FR 70601, November 5, 2020) to construct the SRPPF while also complying with the Settlement Agreement (DOE 2025b) discussed in Chapter 1, Section 1.6. The activities included in the No-Action Alternative at SRS are limited to construction activities. Operational, or pit production, activities are included in the Multi-Site and Single-Site alternatives (Sections S.2.5 and S.2.6, respectively).¹⁶

This is a rigged No Action Alternative just like NNSA did in the draft LANL Site-Wide Environmental Impact Statement (SWEIS). The NNSA rigged the SWEIS with three self-serving scenarios:

- Expanded nuclear weapons programs (contradictorily called the “No Action Alternative”).
- Yet more expanded nuclear weapons programs (“Modernized Operations Alternative”).
- Yet far more expanded nuclear weapons programs (“Expanded Operations Alternative”).

In its Notice of Intent for the LANL SWEIS the NNSA stated:

“For the foreseeable future, NNSA does not consider reducing operational or environmental remediation missions at LANL as reasonable. However, the timeframe for the SWEIS analysis is approximately 15 years into the future, and NNSA recognizes that requirements, needs, opportunities, and vision may change over such a long planning horizon. Consequently, NNSA has not made a final decision on whether to include a Reduced Operations Alternative in this SWEIS. NNSA welcomes input on this and any other alternative the public thinks are reasonable and should be analyzed in the SWEIS.”¹⁷

We responded to that by saying in our October 2022 scoping comments:

“A Reduced Operations Alternative is not only a reasonable alternative but is in the actual best interests of the nation. Such an alternative would best preserve stockpile reliability by foregoing production of new pits that may deviate from tested designs; conservatively maintain the existing, extensively tested nuclear weapons stockpile; augment and accentuate nonproliferation programs,

¹⁶ Draft Pit Production PEIS, NNSA, April 2026, pp. S-10 & 11.

¹⁷ Notice of Intent To Prepare a Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory, NNSA, August 19, 2022, <https://www.federalregister.gov/documents/2022/08/19/2022-17901/notice-of-intent-to-prepare-a-site-wide-environmental-impact-statement-for-continued-operation-of>

especially the development of monitoring and verification technologies that could help underpin a future world free of nuclear weapons; and augment and accentuate cleanup programs that are truly comprehensive, permanently eliminating the threat to groundwater.”

We argue here that the Pit Production PEIS should offer a genuine No Action Alternative or Reduced Operations Alternative that aligns with the 1970 NonProliferation Treaty’s mandate for nuclear disarmament.

As precedence, the Air Force completed an [environmental impact statement](#) in 2023 for its proposed Sentinel intercontinental ballistic missile that included a true no action alternative of no Sentinel deployment. Similarly, there should be a genuine No Action Alternative in the Pit Production PEIS, contrary to NNSA’s assertion that pit production at the Los Alamos National Laboratory (LANL) is “No Action.” This precedence is particularly apt given that the Sentinel is greatly delayed and vastly over budget, putting its successful completion into serious doubt. The direct link between the two issues is that the first new plutonium pits are for the W87-1 warhead for the Sentinel.

The stated No Action Alternative for SRS “limited to construction activities” does perhaps point to the uncertainty of future pit production at the Savannah River Site (SRS), which is facing ever increasing delays and escalating costs. The pit plant at SRS is on its way to becoming the most expensive building in U.S. history. It is becoming increasingly questionable that pit production will be successfully established at SRS (which could then boomerang on LANL). The 2019 Defense Authorization Act required “a detailed plan for designing and carrying out production of plutonium pits 31–80 at Los Alamos National Laboratory, in case the MOX facility is not operational and producing pits by 2030.” So, the strong possibility of surge production at LANL should be thoroughly explored and analyzed in the Pit Production PEIS. Further, that congressionally required plan must be made available as a critical supporting reference document.¹⁸

Moreover, the “Special Study of the National Nuclear Security Administration’s (NNSA’s) Leadership and Management of the Plutonium Pit Mission,” ordered by DOE Deputy Secretary James Danly on August 11, 2025, may possibly point to just how troubled and vulnerable plutonium pit production is at SRS. It could be directly relevant to the formal Multi-Site and Single-Site Alternatives that this Pit Production PEIS proposes and analyzes, possibly instructive as to whether plutonium pit production at SRS is feasible and/or affordable to begin with. We again call for the immediate release of this Special Study, contending that NNSA further violates NEPA by withholding critical information.

So-Called Deterrence

The nuclear weapons powers have always used the one-word rationale of “deterrence” to justify their nuclear stockpiles. It has always been “we have nuclear weapons to deter others from using them against us.” However, in the case of the United States and the Soviet Union/Russia,

¹⁸ There may well be classified elements in that plan, which NNSA should begin to process and redact as needed now to have the LANL surge plan publicly available. Again, it is clearly a critical supporting reference document.

“deterrence” is at best only a half truth. The other half of the equation is that both countries keep nuclear warfighting capabilities that far exceed mere “deterrence” and could end civilization overnight.

The whole thrust of the draft Pit Production PEIS is perhaps best summarized in:

Building the manufacturing capacity to produce at least 80 ppy before the end of the decade is essential to maintaining a reliable nuclear deterrence. Many of the aging pits will have to be replaced with new ones in the coming years to maintain a safe and reliable nuclear stockpile and deterrence.¹⁹

Here we see the conflation of two faulty premises, or perhaps blind articles of faith, that don’t survive serious scrutiny. The aging of pits (or not) is addressed in a comment section below. Concerning maintaining a safe and reliable stockpile, why is it that no pit production is scheduled for the existing, extensively tested nuclear weapons stockpile? Common sense is that the last thing anyone would want to do would be to introduce uncertainties into that stockpile.

Despite that, all future pit production is for new-design nuclear weapons that can’t be tested because of the international testing moratorium, which could erode confidence in the stockpile. Or, alternatively, new designs could prompt the U.S. to return to nuclear weapons testing, which would likely have disastrous proliferation consequences. These are serious issues that NNSA must address in the final Pit Production PEIS.

Concerning “deterrence,” the Pentagon explicitly rejected minimal deterrence while “reiterating the need to maintain counterforce capabilities... not rely[ing] on a counter-value or minimum-deterrence approach...”²⁰ Counterforce is nuclear weapons jargon for targeting military targets and top political leadership, that is waging nuclear war. This is why both Russia and the U.S. have 1,000s of nuclear weapons instead of just the few hundred needed for minimal deterrence. The latter, also known as counter-value, targets cities and civilian populations, which is deeply immoral, characteristic of the basic nature of nuclear weapons as indiscriminate killers. But, because of inevitable immense collateral damage, both counterforce and counter-value arrive at the same potential end point of millions, if not billions, dead. But that said, nuclear war is more likely to occur under counterforce.

Nuclear warfighting creates pressure for endless modifications and/or new designs for the stockpile, which the 2024 Nuclear Employment Strategy characterizes as “flexible capabilities” and “a wide range of employment options.” This is what is driving the U.S.’ \$2 trillion nuclear weapons “modernization” program, which in turn is driving expanded plutonium pit production. At a certain point the so-called “deterrence” meant to deter others becomes the threat that tempts adversaries into pre-emptive first strike. This fuels an escalating nuclear arms race that imperils us all.

¹⁹ Draft Pit Production PEIS, NNSA, April 2026, p. 1-3.

²⁰ The most recent is the *Report on the Nuclear Employment Strategy of the United States*, 07 November 2024, Department of Defense, <https://media.defense.gov/2024/Nov/15/2003584623/-1/-1/1/REPORT-ON-THE-NUCLEAR-EMPLOYMENT-STRATEGY-OF-THE-UNITED-STATES.PDF>

In addition, the very concept of “deterrence” is now being turned on its head. The draft LANL SWEIS claimed:

“Nuclear weapons have played, and will continue to play for the foreseeable future, a critical role in deterring nuclear attack and in preventing large-scale conventional warfare between nuclear-armed states. U.S. nuclear weapons not only defend the U.S. and our allies against conventional and nuclear threats, but also help allies avoid the need to develop their own nuclear arsenals. This, in turn, furthers global security.” (draft LANL SWEIS, Volume 1, PDF page 32).

Putin’s nuclear saber rattling has deterred the U.S. and NATO from militarily intervening in Ukraine. It remains to be seen if large-scale conventional warfare between nuclear-armed states (including NATO) will be prevented. In addition, given new geopolitical uncertainties introduced by the Trump Administration, there is increasing discussion in Europe, South Korea and Japan of their own possible independent “deterrents.”

It is simply a different geopolitical world now. Therefore, under a fourth alternative of not expanding plutonium pit production for so-called deterrence, the Pit Production PEIS should consider needed U.S. global leadership toward nuclear disarmament that the nuclear weapons powers pledged to more than a half century ago in the 1970 NonProliferation Treaty. What is genuinely in our best national security interests? Where should taxpayers’ dollars best be used? That should be fully analyzed in the final Pit Production PEIS.

There is another reason why “deterrence” itself is the threat, one that is perhaps the easiest reason to understand. There is a long history of nuclear weapons accidents and near miscalculations when there can only be zero. The control of nuclear weapons must be perfect when, unfortunately, human beings are not. For example, four one megaton bombs crashed on the coast of Palomares, Spain, in 1966, widely spreading plutonium. Two one megatons bombs were accidentally dropped near Goldsboro, NC, in 1961. One of them automatically went through four of five arming steps with only the last one preventing it from showering Washington, DC with fallout.²¹

We have the instance of one Soviet submarine officer vetoing the decision by two other officers to launch a nuclear-armed torpedo at a U.S. Navy destroyer during the Cuban Missile Crisis. At that time, it would have likely instigated nuclear Armageddon. We have the instance in 1983 when Lieutenant Colonel Stanislav Petrov of the Soviet Air Defense Forces decided not to alert his higher ups, intuitively sensing that something was wrong. Early warning radars had mistaken sunlight reflecting off of clouds for incoming American ICBMs.²²

All of these instances may seem to have taken place long ago while operational safety measures have surely improved since then. But there is a new wrinkle - - artificial intelligence. Will AI

²¹ <https://nsarchive2.gwu.edu/nukevault/ebb475/> Excerpt: “New Details on the 1961 Goldsboro Nuclear Accident Multi-Megaton Bomb Was Virtually “Armed” When It Crashed to Earth in North Carolina, Sandia Lab Report Concluded Nuclear Stockpile Safety Review from the Mid-1970s Identified Four Weapons Systems that Needed “Time Urgent” Evaluation Because of “Nuclear Detonation Safety Concerns” 1986 Sandia Lab Study Found that, with Respect to “Fully Assembled” and “Combat-Ready” Nuclear Weapons, U.S. Could Not Claim “in an Absolute Sense, that We Take Every Action to Ensure their Safety”

²² <https://www.armscontrol.org/act/2017-10/news-briefs/man-who-saved-world-dies-77>

trump human judgment when human instinct was integral to avoiding nuclear Armageddon in the past? We can't really know until it is far too late. But the only way to 100% eliminate that threat is to eliminate nuclear weapons. It is the "deterrence" itself that is the threat.

To repeat, what is genuinely in our best national security interests and where taxpayers' dollars should best be used should be fully analyzed in the Pit Production PEIS. This requires objective examination of "deterrence" and admission that as presently implemented it requires nuclear warfighting capabilities that can end human civilization overnight. That in turn requires the overkill nuclear weapons stockpile and related Department of Defense delivery systems, in short, the \$2 trillion modernization program. While minimal deterrence with just a few hundred warheads would still potentially kill hundreds of millions of people, it would prudently preserve the stockpile with its tested legacy and require vastly lower costs. In the policy sphere, minimal deterrence would be an excellent interim step toward the global nuclear disarmament mandated by the 1970 NonProliferation Treaty, which should be analyzed in the Pit Production PEIS.

Two Near-Peer Nuclear Adversaries?

Much has been made of the fact that China appears to be rapidly expanding its nuclear weapons stockpile after a consistent history of relative moderation, prompting alarms over two near-peer adversaries (i.e., Russia and China). The October 2023 Strategic Posture Report had much to do with this, stating:

"... these threats are such that the United States and its Allies and partners must be ready to deter and defeat both adversaries simultaneously... we find that the United States lacks a comprehensive strategy to address the looming two-nuclear-peer threat environment and lacks the force structure such a strategy will require... we make clear that the fundamentals of America's deterrence strategy remain sound, but the application of that strategy must change to address the 2027-2035 threat environment. Those changes drive necessary adjustments to the posture of U.S. nuclear capabilities – in size and/or composition."²³

Among other things, the Report recommended MIRVing land-based ICBMs, possible replacement of PF-4, and recommended that "once a strategy and its related force requirements are established, the U.S. government determine whether and how nuclear arms control limits continue to enhance U.S. security."

There does appear to be an underlying strategy of ever-increasing rates of plutonium pit production under the draft Pit Production PEIS Multisite Alternative, stating, "At the maximum annual production rate analyzed, NNSA would produce up to 80 ppy at LANL and up to 125 ppy at SRS, such that a total of up to 205 pits could be produced annually."²⁴ With the demise of the New Strategic Arms Reduction Treaty in February 2026, apparently a decision has been made to do away with any arms control treaties. To add to this, the recent eleventh Review Conference of the NonProliferation Treaty miserably failure to make any progress whatsoever toward nuclear disarmament.

²³ *America's Strategic Posture, The Final Report*, October 2023, <https://www.ida.org/research-and-publications/publications/all/a/am/americas-strategic-posture>

²⁴ Draft Pit Production PEIS, NNSA, April 2026, p. S-11.

Oddly, the draft Pit Production PEIS makes only one reference to China, and that is as a footnote listing the original five nuclear weapons power. The draft LANL SWEIS was not so reticent, stating:

While the U.S. has continued to reduce the number and prominence of nuclear weapons, others, including Russia and China, have moved in the opposite direction. They have added new types of nuclear capabilities to their arsenals, increased the prominence of nuclear forces in their strategies and plans, and engaged in increasingly aggressive behavior, including in outer- and cyberspace. By the 2030s, the U.S. will, for the first time, face two major nuclear powers as strategic competitors and potential adversaries. This will create new stresses on stability and new challenges for deterrence, assurance, arms control, and risk reduction. (LANL SWEIS, Volume 1, PDF p. 32)

First, as the biblical passage goes, “Thou hypocrite, first cast out the beam out of thine own eye; and then shalt thou see clearly to cast out the mote out of thy brother's eye.” The U.S. is not lowering the number of its nuclear weapons. In fact, dismantlements are the lowest they have ever been since the end of the Cold War. Despite denials, the U.S. has added new military capabilities to its nuclear weapons stockpile, witness the more accurate W76-1, the low-yield W76-2, the limited earth penetrators B61-11 and -12, and now the new B61-13. Concerning increasingly aggressive behavior, recall Trump threatening “fire and fury like the world has never seen” on North Korea and more recently on Iran threatening to wipe out an entire civilization.

The concept of two near-peer nuclear adversaries has potentially huge implications that could directly impact everything, including plutonium pit production. In October 2023 the Congressional Commission on the Strategic Posture of the United States:

“... conclude[d] that America’s defense strategy and strategic posture must change in order to properly defend its vital interests and improve strategic stability with China and Russia. Decisions need to be made now in order for the nation to be prepared to address the threats from these two nuclear-armed adversaries arising during the 2027-2035 timeframe. Moreover, these threats are such that the United States and its Allies and partners must be ready to deter **and defeat** both adversaries simultaneously.” (Bolded emphasis added)

First, the “and defeat” is significant, going beyond just “deterrence” into nuclear warfighting and planning to win it. The Commission’s specific recommendations are a throwback to the first nuclear arms race. They include deploying multiple warheads on intercontinental ballistic missiles (which increases strategic instability), possibly deploying road mobile ICBMs, putting strategic bombers back on continuous alert status, adding more heavy bombers and strategic submarines, and increased emphasis on tactical or battlefield nuclear weapons. The Commission essentially calls for two deterrents, one for Russia and one for China, with yet-to-be-determined consequences for the future size of the U.S. stockpile.

To achieve all this, the Commission recommends that “DOE/NNSA plan to increase production capacity beyond current POR [program of record].” The National Nuclear Security Administration’s current plan is to produce at least 30 plutonium pits per year at the Los Alamos

National Laboratory (LANL) and at least 50 pits per year at the Savannah River Site (SRS). In alignment with that, the Commission recommends the replacement of LANL's pit production facility known as PF-4. That would be a huge shift from the current program of record of ~\$10 billion in upgrades over a decade. It would be a huge and controversial expense, when at the same time both LANL and SRS are experiencing serious cost increases and schedule delays.

Note that the Commission said, "Decisions need to be made now in order for the nation to be prepared to address the threats from these two nuclear-armed adversaries." The Commission's report received widespread bipartisan praise and support. It's difficult to believe that planning is not already taking place within NNSA and LANL to meet at least some of the Commission's recommendations. The Pit Production PEIS should disclose that planning, particularly as it pertains to increased rates of plutonium pit production and/or a new pit production facility at LANL.

Finally, yet again, there should be a credible alternative in the Pit Production PEIS of restrained nuclear weapons programs that seek to conservatively and reliably maintain the stockpile while the U.S. demonstrates international leadership toward global nuclear disarmament. It is in nobody's interests to fuel a new nuclear arms race, but that is arguably what the draft Pit Production PEIS is doing as it sanctions expanded plutonium pit bomb core production.

The NonProliferation Treaty

The National Nuclear Security Administration (NNSA) claims that it has no choice but to follow congressional requirements to manufacture new plutonium pits. However, Article VI of the U.S. Constitution declares "all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding."

The January 2025 draft LANL SWEIS hypocritically claimed that:

"NNSA missions are conducted fully consistent with current treaty obligations. The SSMP [NNSA's Stockpile Stewardship and Management Plan] is fully consistent with and supports the U.S. commitment to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)... In Article VI of the NPT, treaty parties "undertake to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control." The U.S. takes this commitment seriously and has emphasized dedication to both the long-term goal of eliminating nuclear weapons and the requirement that the U.S. has modern, flexible, and resilient nuclear capabilities that are safe and secure, until such a time as nuclear weapons can prudently be eliminated from the world... The NPT does not provide any specific date for achieving the ultimate goal of nuclear disarmament, nor does it preclude the maintenance of nuclear weapons until their disposition. Continued operations at LANL enable NNSA to maintain the safety, reliability, and performance of the U.S. nuclear weapons stockpile until the ultimate goals of the NPT are attained and are consistent with the NPT." (Volume 1, PDF page 33)

The draft Pit Production PEIS repeats this hypocritical claim:

“NNSA missions are conducted fully consistent with current treaty obligations. The SSMP [Stockpile Stewardship and Management Plan] is fully consistent with and supports the U.S. commitment to the NPT... The NPT was ratified by the Senate in 1969 and officially entered into force as a Treaty of the U.S. in 1970. In Article VI of the NPT, treaty parties “undertake to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.” The United States takes this commitment seriously and has emphasized dedication to both the long-term goal of a world without nuclear weapons and the requirement that the United States maintain modern, flexible, and resilient nuclear capabilities that are safe and secure. The NPT does not provide any specific date for achieving the ultimate goal of nuclear disarmament, nor does it preclude the maintenance of nuclear weapons, pending progress toward disarmament, to deter strategic attacks, assure allies and partners, and achieve objectives if deterrence fails. Continued operations of the NSE [Nuclear Security Enterprise] enable NNSA to maintain the safety, reliability, and performance of the U.S. nuclear weapons stockpile consistent with obligations under the NPT.”²⁵

First, NNSA invokes Article VI without stating the obvious historic fact: the original five nuclear weapons powers, including the United States, have never taken step number one “to pursue negotiations in good faith.” Contradicting NNSA’s claim that “The NPT does not provide any specific date for achieving the ultimate goal of nuclear disarmament,” in 1996 the World Court concluded that there is indeed a timebound obligation in which the NPT Article VI mandate for “negotiations in good faith” must take place. It’s like come on, the NNSA invokes how the NPT has no specific date after 56 years? That is not credible. It is also not credible how the U.S. refuses to recognize the World Court, which after all does reflect majority world opinion.

On the question of when nuclear weapons can be “prudently” eliminated from the world, if not after the end of the Cold War, when will it ever be done? The U.S.’ \$2 trillion “modernization” program directly violates NonProliferation Treaty Article VI, in which expanded plutonium pit production plays a direct role. For the LANL SWEIS and the Pit Production PEIS to claim that it “is fully consistent with and supports the U.S. commitment to the NPT,” both must have a fourth alternative of not expanding nuclear weapons programs. From the beginning, the Pit Production PEIS should comport not only with the NPT’s mandate to disarm nuclear stockpiles, but also with the essential need for the U.S. to lead by example toward ridding the world of weapons of mass destruction.

This is now magnified by the recent failure of the eleventh Review Conference of the NonProliferation Treaty (NPT) to make any progress whatsoever toward the goal of nuclear disarmament. Since the Review Conference is held every five years, this is the third consecutive failure over a span of 15 years.

The stated planning horizon of the draft Pit Production PEIS is fifty years. For NNSA to plan ongoing plutonium pit production over the next half century directly contradicts its claim that “The United States takes this commitment [to the NPT] seriously and has emphasized dedication

²⁵ Pit Production PEIS, NNSA, April 2026, p. 1-5.

to both the long-term goal of a world without nuclear weapons and the requirement that the United States maintain modern, flexible, and resilient nuclear capabilities that are safe and secure.”

This is particularly true given that all future plutonium pit production is not to maintain the safety and reliability of the existing nuclear weapons stockpile. Instead, it is all for new design nuclear weapons that can’t be tested, thereby arguably lowering confidence in the stockpile. Or, alternatively, it could prompt the U.S. to resume testing, which would likely have serious proliferation impacts given that other nations would surely follow. Indeed, plutonium pit production for new-design nuclear weapons that leads to testing could destroy what’s left of the NonProliferation Treaty to begin with.

The Treaty on the Prohibition of Nuclear Weapons

Again, the draft Pit Production PEIS claims that “NNSA missions are conducted fully consistent with current treaty obligations.” The silence is deafening concerning the Treaty on the Prohibition of Nuclear Weapons. That ban treaty, like chemical and biological weapons ban treaties that the U.S. helped to promulgate, has now been in effect for 5 years and ratified by 75 countries, approaching a majority of nations and climbing. The nuclear weapons ban treaty was born out of concern for the humanitarian consequences of nuclear war which the nuclear powers have suppressed. It is also born out of the non-weapons states frustration that the weapons states have never begun to honor the NonProliferation Treaty’s Article VI mandate to disarm. Again, this is particularly true with the third consecutive failure over a span for 15 years of the NPT Review Conference to make any progress whatsoever toward nuclear disarmament. Instead, we are going backwards with the massive “modernization” programs to keep nuclear weapons forever.

Granted that the U.S. has no “treaty obligation” under the TPNW, which it has vehemently opposed and pressured other nations to not sign. The Pit Production PEIS should fully explain and justify why that is so, and why the United States does not at least maintain observer status at the formal Meetings of the State Parties to the Treaty on the Prohibition of Nuclear Weapons held at the United Nations.

Plutonium Pit Aging

NNSA and the Labs frequently use the issue of the potential aging of plutonium pits as a rationale for expanded production. As LANL Director Thom Mason put it:

“We don’t have an immediate concern with aging. Up to this point, the plutonium pits in America’s nuclear weapons have been very robust. But the pits we have today were largely manufactured in the 1980s, and we don’t have the predictive ability to say with certainty that our current, 40-year-old pits will be good until any particular date. It’s sort of glass half full, glass half empty; we can’t prove that they will fail, but we also can’t prove that they will work. **The**

best way to deal with this dilemma is to “take it off the table. We do that by making new pits, immediately.”²⁶

With that he justifies spending tens of billions of dollars on the production of plutonium pits. This is not to ensure the safety and reliability of the existing nuclear weapons stockpile, but instead for new designs that can’t be tested or, alternatively, could push the U.S. back into testing. Tens of billions of dollars that will permanently reshape LANL into a nuclear weapons production facility and permanently impact northern New Mexico as well. Tens of billions of dollars that will help accelerate the new nuclear arms race that is imperiling us all. And, of course, it’s easy to fail to prove whether pits work or not if you don’t try.

During the Cold War the Rocky Flats Plant near Denver was producing up to 2,000 plutonium pits per year. It ceased production in 1989 after the FBI and EPA conducted a dramatic raid investigating environmental crimes. In 1997 limited production of up to 20 pits per year was re-established at the Los Alamos National Laboratory, although the Lab never produced more than eleven pits in any one year.

In the early 2000’s the NNSA was increasingly sounding alarms over plutonium pit aging, saying that pits produced at Rocky Flats in the 1980’s would last only on the order of 45 years.²⁷ But even before then, in 1999 the JASONs (longtime expert consultants to the federal government) were reporting that:

“Pit lifetimes are now discussed as 60 or 90 years... because there is neither evidence nor physical reason to expect that pit aging on the present time scale has in any way degraded weapons performance, there is no reason to rush decision making as to future pit production rates.”²⁸

In 2000, Raymond Jeanloz, a member of the JASONs (but writing in his own capacity), published these findings:

“The most striking result of these studies is that the local deviation from the ideal fcc [face-centered cubic] structure vanishes with aging, disappearing sooner in samples having a higher Ga [gallium, used to alloy the plutonium] content. It is not surprising that the most gallium-poor samples would retain the most structural nonideality over time, because Ga is known to stabilize the d phase (figure 2b); on the nanometer scale, **aging appears to have the same effect as a greater Ga concentration, in that it shifts the Pu to a more stable configuration...**

²⁶ *Pit production explained*, LANL, December 21, 2021, <https://www.lanl.gov/media/publications/national-security-science/1221-pit-production-explained> **bolded emphasis added.**

²⁷ **“In approximately 2020, some pits in the enduring stockpile will be approaching the 45-year pit lifetime.”** *Draft Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility*, USDOE, May 2003, Volume 1, page 2-4, <https://www.energy.gov/sites/default/files/EIS-0236-S2-DEIS-01-2003.pdf> **In the face of Congressional and public opposition DOE never completed a final programmatic environmental impact statement for the Modern Pit Facility.**

²⁸ *Remanufacture*, JASONs, JSR-99-300, October 1999, <https://rlg.fas.org/JSR-99-300.pdf>

“The overall finding from a variety of observations, including detailed electrical-resistivity measurements as a function of temperature (which are sensitive to the density and distribution of defects present), positron annihilation spectroscopy, and other studies, is that the **Pu samples not only retain long-range order but actually get closer to the ideal crystal structure with increasing age...**

“Surprisingly, however, the **high explosive used in US weapons has been found to improve systematically with age** in key measures of performance, such as yielding characteristics and detonation-front velocities.

“Thus, **crucial primary-stage components that were initially subject to concern have been shown through the SSP [Stockpile Stewardship Program] to be robust as they age.** Indeed, there is now consensus among specialists that the Pu pits in the US stockpile are stable over periods of at least 50–60 years, with the most recent studies suggesting a far longer period. More important than the indications of benign aging is the demonstration that the materials are now becoming understood in sufficient detail, and surveillance methods are becoming sensitive enough, to ensure that any signs of degradation will be observed in time to apply the necessary repairs or refurbishment.”²⁹

Despite this expert advice, the NNSA began to push for a new-design Reliable Replacement Warhead and related expanded plutonium pit production. This initially included a proposal for a “Modern Pit Facility” capable of producing up to 450 pits per year, with concerns over possible pit aging cited as the primary driver for this huge new pit production plant.³⁰ However, in 2006 the JASONs concluded in a well-publicized report that plutonium pits have reliable lifetimes of at least 100 years.³¹ Following that, Congress deleted funding for both the Reliable Replacement Warhead and the Modern Pit Facility.

In the mid-1990’s J. Carson Mark³² told NukeWatch that from the beginning LANL had set aside plutonium pits for the express purpose of studying how they age. A Freedom of Information Act (FOIA) request quickly got a response from DOE acknowledging the existence of these “set aside” experiments, but that everything about them was classified. On a side note, Mark telling Nuclear Watch later prompted the organization to ask then-Senator Jeff Bingaman (D-NM) to require a JASON pit life study resulting in their 2006 conclusion that most pit types last at least a century and those that don’t have easy fixes.³³

²⁹ *Science-Based Stockpile Stewardship*, Raymond Jeanloz, Physics Today, 2000, bolded emphases added, <https://nukewatch.org/wp-content/uploads/2024/02/Science-Based-Stockpile-Stewardship.pdf>

³⁰ See *Draft Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility*, USDOE, May 2003, Volume 1, Sec. 2.1.1. “Pit Aging as a Driver,” page 2-1, <https://www.energy.gov/sites/default/files/EIS-0236-S2-DEIS-01-2003.pdf>.

³¹ *Pit Lifetimes*, JASON, November 2006, www.nukewatch.org/facts/nwd/JASON_ReportPuAging.pdf
This JASON study came about because Nuclear Watch New Mexico, knowing of the earlier *Remanufacture* JASON report, suggested to then-Senator Jeff Bingaman that a new JASON pit lifetime study would be appropriate. He then successfully passed that requirement through an amendment to the 2004 Defense Authorization Act.

³² Manhattan Project physicist and leader of LANL’s Theoretical Division from 1947 to 1973

³³ See JASON Plutonium Pit Lifetime Report, November 28, 2006, <https://nukewatch.org/wp-content/uploads/2023/05/pit.pdf>

The debate over plutonium pit aging has been going on for decades, with some NNSA and lab people disputing the accuracy of the 2006 JASON conclusion. Concerning the results of the set aside experiments, Mark exclaimed to Nuclear Watch that, “the big news was no news!”, that is plutonium pits do not functionally age in any time period of practical relevance. If indeed these set aside experiments exist, NNSA should disclose them and incorporate them into any ongoing studies about plutonium pit aging. The status, good or ill, of these legacy pits should directly inform the need for producing or not new pits. And if the existence of these set aside experiments is true, it speaks ill of NNSA and its predecessor DOE Defense Programs to not have revealed them long ago.

In 2012 the Lawrence Livermore National Laboratory added to the reassuring data about pit aging by announcing:

“This continuing work shows that no unexpected aging issues are appearing in plutonium that has been accelerated to an equivalent of ~ 150 years of age. **The results of this work are consistent with, and further reinforce, the Department of Energy Record of Decision to pursue a limited pit manufacturing capability in existing and planned facilities at Los Alamos instead of constructing a new, very large pit manufacturing facility (called the Modern Pit Facility) that would have been capable of producing hundreds of pits a year.**

Bruce Goodwin, principal associate director for Weapons and Complex Integration, says he is “extremely pleased” at the continuing positive results... The results, he says, are highly positive for the safety and reliability of the stockpile and for **avoiding the costs associated with remanufacturing pits.**”³⁴ (Bolded emphases added)

Nevertheless, in May 2018 the Department of Defense and NNSA announced an aggressive plan to produce at least 80 pits per year,³⁵ with simultaneous production at LANL of at least 30 pits per year and at least 50 pits per year at the Savannah River Site, costing at least \$50 billion over 30 years.³⁶

The FY 2019 Senate Energy and Water Development Committee report (S.R. 115-258) mandated a new JASON study that should:

“...include recommendations of the study for improving the knowledge, understanding, and application of the fundamental and applied sciences related to the study of plutonium aging and pit lifetimes, an estimate of minimum and likely life-times for pits in current warheads, and the

³⁴ *Plutonium at 150 years*, LLNL, 2012, <https://www.llnl.gov/news/plutonium-150-years>

³⁵ *Joint Statement from Ellen M. Lord and Lisa E. Gordon-Hagerty on Recapitalization of Plutonium Pit Production*, National Nuclear Security Administration, May 10, 2018, www.energy.gov/nnsa/articles/joint-statement-ellen-m-lord-and-lisa-e-gordon-hagerty-recapitalization-plutonium-pit

³⁶ See *Plutonium Pit Production Engineering Assessment Results*, slide 10, https://nukewatch.org/newsite/wp-content/uploads/2019/03/FINAL-Pu-Pit-Production-EA-Results-05.14.18_Unclassified.pdf This combines Alternative 1 (SRS) and Alternative 2a (LANL) for a total of \$43 billion. Since then the construction costs of the Savannah River Plutonium Processing Facility have more than doubled to \$11 billion, rounding out pit production costs over 30 years at \$50 billion. This is bound to go up. It should also be noted that NNSA cost estimates of new warheads do not include the cost of pit production.

feasibility of reusing pits in modified nuclear weapons. The report shall be submitted in unclassified form but may include a classified annex.”³⁷

However, JASON did not have time to do a full study, as it said....

The report requested by the SEWD [Senate Energy and Water Development Committee] was too wide in scope for JASON to complete during its 2019 Summer Study. NNSA, JASON, and SEWD staff agreed to divide the study into two phases:

- Phase One: Perform a 2019 JASON Summer Study that would generate a letter report covering updates since the prior JASON study on plutonium aging, Pit Lifetime, delivered in 2006.
- Phase Two: Assess the need for the full study, and if deemed necessary and timely, perform a more detailed, multi-year JASON study.³⁸

Phase One, the letter report, diminutive in size (all of two and a half pages), was completed. For Phase Two, in the letter report JASON did assess the need for a new study (see below) but did not receive any further directive from Congress or the NNSA to “perform a more detailed, multi-year JASON study.”

However, conveniently for NNSA LANL Director Thom Mason, the JASONs did recommend that “pit manufacturing be re-established as expeditiously as possible in parallel with the focused program to understand Pu aging...” So NNSA has moved aggressively to expand plutonium pit production but has not updated JASON-reviewed pit aging data as far as is publicly known. It is perhaps noteworthy that the leader of the 2019 JASON Letter Report later became the NNSA Deputy Administrator of Defense Programs.

In that capacity, Marv Adams again trotted out plutonium aging as a declarant in the lawsuit in which a federal judge ruled NNSA to be in noncompliance with NEPA. Adams claimed that “Pit performance degrades over time... There is no concern over reliability today, but concerns will develop as existing pits continue to age.”³⁹ If so, show us the evidence!

What he also declared is that:

“... the requirements these [future] warheads must meet differ from those met by existing warheads. In some cases, existing pits that might seem available for reuse are not well suited to the new requirements or are not available in the needed quantities. This is one reason pit manufacturing is needed without further delay.”

These “requirements” are of course not specified. But here one of our central points is again reaffirmed. **Pit production is not being driven by pit aging, although that is a primary false justification for it. Pit production is being driven by new-design nuclear weapons for the new arms race.**

³⁷ Senate Report 115-258, ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, 2019, page 104, <https://www.congress.gov/115/crpt/srpt258/CRPT-115srpt258.pdf>

³⁸ Letter Report to the NNSA, JASON, November 13, 2019, but not transmitted by NNSA to Congress until April 6, 2020, <https://irp.fas.org/agency/dod/jason/pit-aging.pdf>

³⁹ DOE/NNSA Plutonium Pit NEPA Settlement Agreement 01/16/25 <https://nukewatch.org/wp-content/uploads/2025/01/Settlement-Agreement-and-Exhibits.pdf> PDF p. 27

The 2019 JASON letter does point the way to what future pit aging study should address:

“...in general, studies on Pu aging and its impacts on the performance of nuclear-weapons primaries have not been sufficiently prioritized over the last decade.”

“The [labs’ pit aging studies] program should assess and, if necessary, mitigate threats to primary performance caused by Pu aging. The labs briefly presented their program to address Pu aging to JASON. The plan seemed sensible, but a detailed JASON assessment would require additional information about the program as well as technical details.

Continued study of Pu-aging should address the following:

- Investigation of the properties of naturally and artificially aged Pu that are relevant to primary yield. These include compressibility, strength, and entropy at weapons-relevant pressures and densities.
- Completion of aging studies for the full set of Pu materials used in the stockpile.
- Extending the range of accelerated aging to identify the types, modes, timescales, and uncertainties in changes of Pu behavior that would affect primary performance.
- The utility of integrated sub-critical experiments with new and aged Pu pits should be explored. They could cover the temperature and pressure conditions encountered during primary implosion to provide information about consequences of Pu aging.”

The NNSA and the nuclear weapons labs have capitalized on this half-of-a study, citing it as a “paradigm shift.” For example, as the Los Alamos National Laboratory puts it:

“In 2019, the independent scientific advisory group Jason released a study that assessed plutonium pit lifetimes. The study, a follow up to the 2006 Jason report that concluded there wasn’t enough proof to support a plutonium aging issue, stated that plutonium aging might in fact eventually impact the reliability of U.S. nuclear weapons. In the unclassified summary, the authors “urge that pit manufacturing be re-established as expeditiously as possible in parallel with the focused program to understand aging, to mitigate against potential risks posed by Pu aging on the stockpile.” With this sudden paradigm shift, concern about aging pits has become more palpable in recent years. How much longer will pits last?

“We don’t have an immediate concern with aging,” says Los Alamos Director Thom Mason. “Up to this point, the plutonium pits in America’s nuclear weapons have been very robust. But the pits we have today were largely manufactured in the 1980s, and we don’t have the predictive ability to say with certainty that our current, 40-year-old pits will be good until any particular date. It’s sort of glass half full, glass half empty; we can’t prove that they will fail, but we also can’t prove that they will work.”

The best way to deal with this dilemma is to “take it off the table,” Mason explains. “We do that by making new pits, immediately.” (Bolded emphasis added.)⁴⁰

⁴⁰ Pit production explained, LANL, December 21, 2021, <https://www.lanl.gov/media/publications/national-security-science/1221-pit-production-explained>

Congress has made its concern over the lack of pit aging studies explicit in legislation. The FY 2021 Consolidated Appropriations Act enacted the following provision:

“Pit and Plutonium Aging.-There is concern with the apparent lack of focus on advancing knowledge regarding pit and plutonium aging since the JASONs conducted its first study in 2006. Given the future needs of the nation's nuclear deterrent, a robust program of research and experimentation is needed. Therefore, NNSA is directed to develop a comprehensive, integrated ten-year research program for pit and plutonium aging that represents a consensus program among the national laboratories and federal sponsors. Such a plan shall include estimated cost of ongoing research, new or upgraded capability needs, and key near-, mid-, and long-range milestones. The plan shall be submitted to the Committees on Appropriations of both Houses of Congress not later than 180 days after enactment of this Act.”⁴¹

Congress gave further direction in the FY 2023 Defense Authorization Act:

SEC. 3124. CERTIFICATION OF COMPLETION OF MILESTONES WITH RESPECT TO PLUTONIUM PIT AGING.

- (a) REQUIREMENT.—The Administrator for Nuclear Security shall complete the milestones on plutonium pit aging identified in the report entitled “Research Program Plan for Plutonium and Pit Aging”, published by the National Nuclear Security Administration in September 2021.... and
- (2) seek to enter into an arrangement with the private scientific advisory group known as JASON to conduct, not later than 2030, an assessment of plutonium pit aging.

Compelled by a Freedom of Information Act request, NNSA released its 2021 “Research Program Plan for Plutonium and Pit Aging” to the public, but it is nearly 50% redacted (which is under appeal).

Why the lack of openness over plutonium pit aging? Surely general findings could be disclosed without revealing classified design details. This casts a pall of suspicion that NNSA is deliberately dragging its heels on a new, comprehensive pit aging study because it knows it won't support its aggressive drive for production of new design pits for new design nuclear weapons. And why wait until 2030 for a new assessment of pit aging when by that time tens of billions of dollars will have already been spent on plutonium pit production?

The draft LANL SWEIS noted that “Commenters request that the Plutonium Pit Aging Study be completed by NNSA before pit production starts.” The draft LANL SWEIS responded with “The need for pits was evaluated in the CT SPEIS [2019 Complex Transformation Supplemental PEIS], the [2020] SRS Pit Production EIS, and the 2020 LANL SWEIS SA. These documents address the Plutonium Pit Aging Study.” (Volume 2, PDF page 210)

We roundly condemn that statement as misleading, more NNSA obfuscation, and downright wrong. NNSA has not fully disclosed the issue of plutonium pit aging, or rather the lack of it, since the 2006 JASON Life Study, even as it spends tens of billions of dollars for new-design nuclear weapons for the new nuclear arms race. **We reiterate, there should be a new and full independent pit life study before plutonium pit production begins.**

⁴¹ FY 2021 Consolidated Appropriations Act, Division D, p. 108, <https://www.congress.gov/116/statute/STATUTE-134/STATUTE-134-Pg1182.pdf>

Similarly, the Pit Production PEIS should incorporate the findings of our colleague Dr. Dylan Spaulding, a senior scientist and physicist at the Union of Concerned Scientists, or refute them in detail, if the agency can.

In his chapter “Assessing the Lifespans of Plutonium Pits,” Dr. Spaulding concluded:

“Plutonium aging is not a credible motivation for renewing pit production at this time. No new technical evidence suggests that the lifetime of plutonium in pits is any shorter than the previously determined 85 to 100 years. If anything, accelerated aging studies have shown that the onset of deleterious effects is slower than expected and that plutonium’s unusual metallurgical behavior may slow or counteract many processes thought to contribute to aging.

Publicly reported conclusions regarding both static and dynamic equation-of-state data suggest that the performance of plutonium in US weapons is not measurably different at four to five decades of age.

Signs of void swelling and helium-bubble accumulation, often cited as a potentially catastrophic mechanisms that could result in an unacceptable reduction in performance margin, have not been seen to be significant in samples aged at an accelerated rate to 200 years of age.

The acceptable service life of the primary stage in nuclear weapons may be determined by components other than plutonium. The service life of a nuclear weapon’s primary stage may be shorter than 85 to 100 years, but such effects could, in principle, be handled without remanufacturing the plutonium pit itself.⁴²

Here, we specifically incorporate Dr. Spaulding’s [study](#) by reference into the Pit Production PEIS.

[Repeated from above] Update July 15, 2026, one day before draft Pit Production PEIS comment period expires: Nuclear Watch New Mexico and the Union of Concerned Scientists (UCS) received the Plutonium Aging: Executive Summary (Unclassified) in response to our Freedom of Information Act (FOIA) requests to the National Nuclear Security Administration (NNSA).⁴³

It is just three pages, one title page and two pages of text, both completely redacted. The claimed FOIA exemption is (b)5, which “incorporates the attorney-client privilege, attorney work-product privilege, and deliberative process (or pre-decisional) privilege.” We think this is an outrageous abuse of FOIA given NNSA’s often repeated claims that potential aging concerns drive the \$60 billion+ plutonium pit production program and the Pit Production PEIS comment period expires tomorrow. In contrast, a JASON 2006 Pit Life study’s executive summary concluded that most pit types last at least 100 years and those that don’t have easy fixes.⁴⁴ (Average plutonium pit age is now ~43).

⁴² *Plutonium Pit Production*, Dr. Dylan Spaulding, Union of Concerned Scientists, May 2025, <https://test.ucsaction.org/sites/default/files/2025-05/Plutonium-Pit-Production-report.pdf>

⁴³ Redacted *Plutonium Aging: Executive Summary (Unclassified)*, <https://ucs-documents.s3.us-east-1.amazonaws.com/nuclear-weapons/JASON-Plutonium-Aging-Executive-Summary-Unclassified-Redacted.pdf>

⁴⁴ *Pit Lifetimes*, JASON, November 2006, www.nukewatch.org/facts/nwd/JASON_ReportPuAging.pdf
This JASON study came about because Nuclear Watch New Mexico, knowing of the earlier *Remanufacture*

The FY 2019 Senate Energy and Water Development Committee report (S.R. 115-258) mandated a new JASON study that should:

“...include recommendations of the study for improving the knowledge, understanding, and application of the fundamental and applied sciences related to the study of plutonium aging and pit lifetimes, an estimate of minimum and likely life-times for pits in current warheads, and the feasibility of reusing pits in modified nuclear weapons. The report shall be submitted in unclassified form but may include a classified annex.”⁴⁵

The universal presumption is that an unclassified summary will be released and made publicly available. The JASON 2006 Pit Life study’s executive summary was released and made fully available to the public. A follow-on JASON’s 2019 “Letter Report” was released and made fully available to the public.⁴⁶ Senator Elizabeth Warren and Rep. John Garamendi have unsuccessfully demanded release of the new pit life study.⁴⁷ A July 6 letter of demand by Nuclear Watch’s lawyers at the South Carolina Environmental Law Project remains unanswered.⁴⁸ Nuclear Watch New Mexico’s and the Union of Concerned Scientists’ requests for expedited FOIA processing precisely because of the Pit Production PEIS public comment period was denied. Instead, we get this completely redacted version the day before the comment period expires on July 16, which ironically is the 81st anniversary of the Trinity Test of the world’s first plutonium pit.

Nuclear Watch New Mexico believes this is an unlawful attempt to further violate NEPA. We remind NNSA that “An agency’s hard look should include neither researching in a cursory manner nor sweeping negative evidence under the rug.”⁴⁹

The final Pit Production PEIS must answer this question, what is NNSA hiding by completely redacting the Plutonium Aging: Executive Summary (Unclassified)?

Maintaining Stockpile Reliability

There were more than forty references in the draft LANL SWEIS that one of LANL’s main missions is “maintaining and enhancing the safety, reliability, and effectiveness of the U.S. nuclear weapons stockpile.” “Deterrence” discussed above and “stockpile reliability” are the

JASON report, suggested to then-Senator Jeff Bingaman that a new JASON pit lifetime study would be appropriate. He then successfully passed that requirement through an amendment to the 2004 Defense Authorization Act.

⁴⁵ Senate Report 115-258, ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, 2019, page 104, <https://www.congress.gov/115/crpt/srpt258/CRPT-115srpt258.pdf>

⁴⁶ Letter Report to the NNSA, JASON, November 13, 2019, but not transmitted by NNSA to Congress until April 6, 2020, <https://irp.fas.org/agency/dod/jason/pit-aging.pdf>

⁴⁷ Joint Senator Warren- Rep. John Garamendi letter to DOE secretary, December 16, 2025, https://www.warren.senate.gov/wp-content/uploads/media/doc/letter_to_doe_nnsa_re_pit_production_mismanagement.pdf

⁴⁸ SCEL P’s letter of demand to NNSA is available at <https://nukewatch.org/demand-letter-for-pit-peis-critical-documents-and-extension-of-public-comment-period>

⁴⁹ *Nat’l Audubon Society v. Dep’t of Navy*, 422 F.3d 174, 194 (4th Cir. 2005).

nuclear weapons establishment's quasi-religious mantras for its \$2 trillion "modernization" program, which repeated every year induces Congress to shower it with money. But given that future pit production is to produce new design nuclear weapons, is this really true?

The draft LANL SWEIS quotes "Restoring the ability to produce plutonium pits for primaries will guard against the uncertainties of plutonium aging in today's stockpile and will allow new pit designs to be manufactured, if necessary for future weapons," as one of the three pillars of Biden's 2022 Nuclear Posture Review.⁵⁰

It is an indisputable fact that new pit designs will be manufactured for future new-design nuclear weapons, specifically the W87-1 ICBM warhead at LANL and the sub-launched W93 warhead at SRS. The related corollary omitted from public attention is that no future pit production is to maintain the safety and reliability of existing nuclear weapons, which have been extensively tested. None, zero. New pits with changed designs cannot be full-scale tested because of the existing international testing moratorium, thereby likely eroding confidence in stockpile reliability. Or, alternatively, these new designs could prompt the U.S. to return to nuclear weapons testing, which a former national security advisor to Trump has already called for. While renewed nuclear weapons testing could do much to restore confidence in stockpile reliability, it would have disastrous international proliferation impacts.

The inescapable conclusion is that future pit production is NOT for the claimed twin rationales of deterrence and maintaining stockpile reliability, nor is it because of pit aging issues (see previous comment section). Instead, it is for new design nuclear weapons for the new escalating nuclear arms which this Pit Production PEIS seeks to aid and abet. Therefore, once again, this Pit Production PEIS must have a fourth alternative of conservatively and prudently maintaining the reliability of the existing, extensively tested nuclear weapons stockpile while the U.S. plays a global leadership role toward fully honoring the NPT's mandate for nuclear disarmament.

Related issues that the Pit Production PEIS must address are:

- What is the justification for new-design nuclear weapons? Why aren't existing nuclear weapons more than sufficient for maintaining "deterrence"?
- Could new design nuclear weapons with new plutonium pits prompt the U.S. to resume testing, which would certainly have strongly negative international proliferation consequences?
- Will confidence in the stockpile be eroded if new-design nuclear weapons with new plutonium pits are not full-scale tested?

Pit Reuse

The U.S. already has more than 15,000 plutonium pits in storage. The Pit Production PEIS should thoroughly analyze the reuse of existing pits as a viable alternative to the manufacturing of new pits. Former NNSA Administrator Jill Hruby has already indicated in congressional

⁵⁰ LANL SWEIS, Volume 1, PDF page 32

testimony that by default existing pits will be reused in the initial manufacturing of new-design nuclear weapons. Why not all, especially given potential cost savings and higher confidence in tested designs?

The 2020 Savannah River Site Environmental Impact Statement specifically stated that pit reuse is being considered, as follows:

Life extension programs include pit reuse activities. The Complex Transformation SPEIS (NNSA 2008a) provides the following description of pit reuse, which has been taken from the SSM PEIS (DOE 1996, p. S-20): “Intrusive pit modification reuse requires handling and processing of the plutonium internal to the pit. Non-intrusive pit modification reuse involves the external features of the pit and does not require an extensive plutonium infrastructure; the risk of contamination and generation of radioactive waste is very low for non-intrusive modification activities.”

“Implementing a moderate pit manufacturing capability now is a prudent approach to mitigate against age-related risk. For the foreseeable future, NNSA will rely on a combination of newly manufactured pits and judicious reuse of existing pits to modernize the U.S. nuclear stockpile. This approach enables NNSA to implement a moderately sized pit manufacturing capability of not less than 80 pits per year beginning during 2030.”⁵¹

We note the existence of the Special Nuclear Material Component Requalification Facility at the Pantex Plant, also the site for storage of at least 15,000 existing pits. The Plant itself has boasted how pit reuse is much less expensive and environmentally damaging than the production of new pits.

“With underground testing long out of the question, the health of the country’s nuclear weapons stockpile relies in part on pit testing conducted at Pantex. At Pantex’s Special Nuclear Material Component Requalification Facility, pits — a nuclear weapon’s heart — are probed for analytical data... Requalification allows a pit to stay in the stockpile; surveillance involves obtaining information on a pit, then sharing it with the national laboratories to help certify to the President that the nuclear weapons stockpile is at an extremely high level of quality.”⁵²

We contend that pit reuse must be analyzed in detail in the Pit Production PEIS as a more than credible alternative. That in turn should help to determine the needed rate of production of new pits at LANL and SRS.

We are well aware of NNSA’s arguments against pit reuse. For example, in response to public comments, the SRS EIS stated:

“S.2.3.4 Only Reuse Existing Pits

NNSA currently stages plutonium pits at Pantex. Like the pits in the active stockpile, those pits are aging and would not mitigate plutonium aging risks or enable NNSA to implement enhanced safety features to pits to meet NNSA and DoD requirements. As identified earlier in Sections S.1.2.1 and S.2.1, this SRS Pit Production EIS analyzes judicious reuse of pits from the existing

⁵¹ *Final Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site in South Carolina*, NNSA, September 2020, Footnote one, p. S-3 & S-4, <https://www.energy.gov/nepa/articles/doe-eis-0541-final-environmental-impact-statement>

⁵² *Day in the Life of a Pit*, Pantex Plant, July 15, 2015, <https://pantex.energy.gov/news/blog/day-life-pit>

stockpile, however, the Atomic Energy Defense Act requires the production of new pits, so this alternative would not support the purpose and need for agency action (50 U.S.C. § 2538a). Consequently, an alternative that relies only on reused pits was eliminated from detailed analysis.”⁵³

Here, we attempt to attack that argument head on. As we extensively discussed in our section on plutonium pit aging, there is no publicly available evidence that aging effects will impact plutonium pit reliability in any foreseeable practical time scale. We have only the NNSA and lab directors invoking uncertainty (however, we do concede that there is certainly uncertainty when the NNSA and lab directors seem to avoid new pit aging studies that could alleviate that uncertainty). If there is classified information showing serious aging effects, well then, sanitize it and release it. Put it into a declassified form that can help convince the public that the risks of new pit production are justified. Among such risks we include the exorbitant expense, increased radioactive wastes and the uncertainties that new designs could introduce, including a possible resumption of full-scale testing,

Concerning “enhanced safety features to pits to meet NNSA and DoD requirements,” we assert that “safety” is certainly a convenient mom and apple pie issue. Who can be against “safety”?

However, we fear that “safety” is a Trojan Horse for nuclear weapons designers to do whatever they want in an endless string of weapons variants and new designs. On a cautionary note, any kind of “enhanced safety features to pits” that are intrusive to the pits themselves could conceivably impact the all-important symmetry of implosion and subsequent mix of plutonium and tritium, potentially impacting reliability. This, again, could lead to full-scale testing with serious international proliferation consequences.

Concerning “the Atomic Energy Defense Act requires the production of new pits,” yes, there is no getting around that. It is the NNSA’s trump card. However, we are aware of how legislative sausage gets ground. The influence of the nuclear weapons labs prompted that statutory requirement to begin with. As Ray Charles sang, “Them that got get.” But that does not make it right or in the country’s best national security interest.

A declaration by Marvin Adams, NNSA Deputy Administrator for Defense Programs, is relevant here. He stated, “Pit performance degrades over time... There is no concern over reliability today, but concerns will develop as existing pits continue to age.”

If so, show us the evidence! If there is no concern today, what is the projected date that such concerns would be valid? You can’t have it both ways, saying everything is fine today but will be terrible tomorrow without evidence.

But Adams also declared that the:

“...requirements these [future] warheads must meet differ from those met by existing warheads. In some cases, existing pits that might seem available for reuse are not well

⁵³ Ibid., p. S-25

suited to the new requirements or are not available in the needed quantities. This is one reason pit manufacturing is needed without further delay.”⁵⁴

Here we get into the nub of things. Those “requirements” are of course not specified. But here one of our central points is again reaffirmed. Pit production is not being driven by pit aging, although that is the primary false justification for it. Pit production is being driven by new-design nuclear weapons for the new arms race.

We assert that the correct NNSA strategy would be to forego new designs and new pit production for them while relying on non-intrusive pit requalification, or pit “reuse,” to maintaining the existing, extensively tested stockpile as needed. That is what a Pit Production PEIS should consider as a credible fourth alternative to expanding nuclear weapons programs.

Another reason pit reuse needs serious evaluation is that NNSA has been forced to rely upon it because of its own delays and cost escalations. This is made clear in former NNSA Administrator Jill Hruby’s response to Sen. Angus King’s question, “Is the pit production schedule running in parallel with the renewal of the triad?”

“Yeah, we have a plan that’s fully consistent with the schedule with the Department of Defense to put new pits in our warheads. Now, in some cases, the Savannah River is... We’re targeting completion of construction of the Savannah River Plutonium Processing Facility in 2032, and then we have to introduce plutonium. We have to introduce the processes and the rate production. That’ll take a few more years. But our plan is to be able to produce pits for the new W93 warhead, and we’re targeting at least half of that population. We don’t think we can get that facility up in time to do all of the W93 builds, but it’s important that we have a fair number of those new pits because **our option is to reuse pits**, which introduces some uncertainty, but more importantly, it limits what else we can do and our stockpile when we reuse those pits.”⁵⁵

Thus, it looks like up to half of the new-design W93 warheads could have reused pits. We again argue that untested new-design nuclear weapons should not be added to the stockpile because of the uncertainties they will introduce. But the specific point here is that pit reuse is real and is planned to be used. It should be so analyzed and considered as a more than credible alternative to new pit production in the Pit Production PEIS.

Plutonium Disposition

The draft LANL SWEIS stated:

⁵⁴ Declaration of NNSA Deputy Administrator Marvin Adams, in opposition to our successful lawsuit for a programmatic environmental impact statement on pit production, No 1:21-cv-01942-MGL, https://nukewatch.org/wp-content/uploads/2025/04/Signed-by-NA-10-APPELLATE-540618-v1-Nuclear_Pits_Dr_Adams_Declaration_121224-FINAL-v2.pdf

⁵⁵ Senate Committee on Armed Services, Hearing title: To receive testimony on the Department of Energy and National Nuclear Security Administration atomic energy defense activities in review of the Defense Authorization Request for Fiscal Year 2025 and the Future Years Defense Program, April 17, 2024, bolded emphasis added.

“As a result of the announced delay in implementation of the SPDP project as analyzed in the SPDP EIS,⁵⁶ this SWEIS also analyzes the potential limited enhancement of operations of the ARIES processing line in PF-4. This limited enhancement would take advantage of efficiencies in the process and would increase the amount of actinides processed in support of surplus plutonium disposition from the current limit of 400 kilograms per year to 700 kilograms per year. This increase in annual throughput was previously analyzed as part of the Expanded Operations Alternative in the 2008 LANL SWEIS. There would be no change to the existing building footprint for the limited enhancement (no new construction) nor would any additional floor space be required in PF-4 for ARIES operations. This limited enhancement of operations of the ARIES processing line would not violate the prohibition on ARIES expansion as expressed in Section 3116 of the 2024 National Defense Authorization Act, codified at 50 U.S.C. § 2538a(f).” (Volume 1, PDF p. 95)

AS LANL explains, the purpose of the Advanced Recovery and Integrated Extraction System (ARIES) is to:

“...convert plutonium metal that could be used to make nuclear weapons into plutonium oxide powder. The program supports the Laboratory’s—and the nation’s—nuclear nonproliferation commitments by helping to prevent the spread of weapons-grade nuclear material...

Initially, the United States hoped to convert weapons-grade plutonium into fuel for commercial power reactors, but that plan was scrapped when cost estimates skyrocketed.⁵⁷ Instead, in 2018, Congress approved a much less expensive “dilute and dispose” plan in which Los Alamos receives surplus nuclear weapon pits (cores) from the Pantex plant near Amarillo, Texas. The pits are disassembled, using a machine called a pit cutter, and the plutonium is placed into a furnace for up to 48 hours. The heat from the furnace turns the plutonium metal into plutonium oxide powder, which is then blended to ensure uniformity.”⁵⁸

First of all, the “announced delay in implementation of the SPDP project” is reflective of NNSA’s prioritization of nuclear weapons programs above all. This reputed nonproliferation program is being delayed because essentially NNSA can’t do both at the same time, that is expand ARIES operations and plutonium pit production in PF-4’s limited floor space. That is exactly why Congress prohibited expansion of ARIES so that NNSA can focus on nuclear weapons production while cutting nonproliferation programs. But this is not to say that ARIES doesn’t also play a role in supporting pit production, as the draft SWEIS states:

“The process development work in the ARIES processing line also supports plutonium pit production, as described in the 2008 SWEIS, for actinide materials science and processing R&D. The disassembly process developed for ARIES supported development of similar equipment used in the first step in recovery of plutonium from pits arriving from Pantex. Equipment used in

⁵⁶ Surplus Plutonium Disposition Program Final Environmental Impact Statement (DOE/EIS-0549), Department of Energy, December 2023, <https://www.energy.gov/sites/default/files/2024-01/final-eis-0549-surplus-plutonium-disposition-volume-2-2023-12.pdf>

⁵⁷ Left unsaid is the fact that the canceled MOX Fuel Fabrication Facility at the Savannah River Site cost taxpayers around \$7 billion for nothing (but is unknown since the government has not publicly given an accounting for it). It is now being repurposed into the Savannah River Plutonium Processing Facility for unneeded pit production, originally estimated at \$4 billion but now costing more than \$11 billion.

⁵⁸ *Metal to powder: The ARIES program alters plutonium so that it can’t be used in nuclear weapons*, LANL, April 2022, <https://www.lanl.gov/media/publications/national-security-science/0422-aries>

ARIES in PF- 4 can be used to support pit disassembly for the pit production mission.” (Volume 1, PDF page 631)

So, the question is, which the Pit Production PEIS should answer, will ARIES be used to provide feedstock plutonium for pit production (presumably pre-oxide)?

To quote the draft LANL SWEIS again:

“This limited enhancement would take advantage of efficiencies in the process and would increase the amount of actinides processed in support of surplus plutonium disposition from the current limit of 400 kilograms per year to 700 kilograms per year. This increase in annual throughput was previously analyzed as part of the Expanded Operations Alternative in the 2008 LANL SWEIS.” (Volume 1, PDF p. 95)

That 75% increase in plutonium is a lot and its approval reliant upon the 2008 SWEIS is insufficient. As we stated in our comments on the draft 2008 LANL SWEIS:

DSWEIS Table 3-18 states that the Expanded Operations Alternative will include the capacity to disassemble up to 500 plutonium pits per year, in contrast to the “No Action Alternative” of 200 pits per year. Almost no discussion ensues, except Special recovery processes are performed, including demonstration of the disassembly and conversion of plutonium pits using hydride-dehydride processes and development of expanded disassembly capacity. DSWEIS, p. 3-57. This is a significant failure that a new DSWEIS must correct.

“Hydride-dehydride processes” are probably the “Advanced Recovery and Integrated Extraction System” (ARIES), which a new DSWEIS should fully explain the merits and demerits thereof. What waste volumes in all categories will result from ARIES? What safety problems might there be with the process? ⁵⁹

These questions merit full reconsideration in the Pit Production PEIS. It is not clear how expanded pit production can safely operate concurrently with other major plutonium programs at the aging PF-4 facility, very much including ARIES. The Government Accountability Office (GAO) raised this issue years ago with no apparent resolution, saying:

“However, plans for converting additional surplus plutonium into plutonium oxide are uncertain because of two issues. These issues include NNSA’s still-developing plans for new pit production, which will also take place at LANL, and issues surrounding the agency’s ability to ship newly produced plutonium oxide for dilution to DOE’s Savannah River Site (SRS) in South Carolina. According to agency officials, NNSA and DOE are taking several actions that, if successfully implemented, are designed to allow NNSA to meet its long-term plutonium oxide production goals. These actions include continuing to review plutonium oxide and pit production plans, increasing plutonium storage at LANL, reducing the amount of SRS’s surplus plutonium, and accelerating the shipment of diluted plutonium from SRS to WIPP.” ⁶⁰

⁵⁹ *Comments to the National Nuclear Security Administration on the Draft Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory*, Nuclear Watch New Mexico, September 27, 2006, https://nukewatch.org/oldsite/facts/nwd/NWNM_SWEIS_Comments.pdf

⁶⁰ *SURPLUS PLUTONIUM DISPOSITION NNSA’s Long-Term Plutonium Oxide Production Plans Are Uncertain*, GAO, October 2019, “What GAO Found,” <https://www.gao.gov/assets/gao-20-166.pdf>

There will be programmatic conflicts and competition for PF-4 floor space between ARIES and plutonium pit production. As GAO reported on:

NNSA officials told us in February 2019 that as a result of pit production requirements, the agency might need to use a portion of the processing areas in PF-4 for pit production that the agency had planned to use for plutonium oxide production. Pit production requirements also may use more space in the high-security vault in PF-4 where plutonium must be temporarily stored. Also, in February 2019, NNSA officials said that PF-4's high-security storage space is already near full capacity and that pit production may demand storage space that NNSA had planned to use for plutonium oxide production.

Reviewing use of operational space in PF-4. LANL reported in March 2019 that the requirement to produce 30 pits per year would have no significant negative impact on plutonium oxide production. However, LANL reported that a number of programs, including pit production, were planning to increase operations in PF-4, placing demands on the aging facility that could lead to more frequent maintenance outages.⁶¹

While NNSA is taking actions to address pit production and shipment issues, the agency continues to work on refining the long-term plutonium oxide production goals in its 2018 conceptual plan. However, NNSA officials said that establishing firm long-term plutonium oxide production plans now would be premature and that the agency would use the next several years to balance plutonium oxide production, pit production, and shipment issues as they refine long-term production plans.⁶²

In short, the conflicts that GAO point out cry out for both nation-wide programmatic review and LANL site-wide review.

The operation of the Advanced Recovery and Integrated Extraction System (ARIES) at LANL and the transport of plutonium from Pantex to be processed in ARIES must be fully reviewed in the Pit Production PEIS. Reaching back for blanket approval in the 2008 LANL SWEIS is not appropriate given the new programmatic demands on PF-4, particularly expanded plutonium pit production.

NNSA's proposal for now is to operate ARIES at LANL in order to produce plutonium oxide to be shipped to the Savannah River Site for downblending and disposal in WIPP. However, the Senate's version of the 2020 National Defense Authorization Act directed NNSA to consider alternative locations for the plutonium oxide production mission, including SRS. Any NNSA document relevant to moving ARIES to SRS should be included in the reference documents for the Pit Production PEIS. In addition, the environmental and proliferation risks of shipment of plutonium oxide from ARIES at LANL to SRS must be fully discussed.

Finally, President Trump recently issued a vague Executive Order that seemed to cancel the plutonium disposition program and ordered the startup of plutonium reprocessing for commercial reactor fuel. If so, this would be a major departure from policy prohibiting plutonium reprocessing dating back to the Carter Administration. The pending Pit Production PEIS should

⁶¹ Ibid., page 18

⁶² Ibid., page 22

address this issue and how it may or may not impact expanded plutonium pit production, particularly as to how the two issues may intersect at LANL's main plutonium facility, PF-4.

All Involved Sites Must be Programmatically Considered

As co-plaintiff Nuclear Watch New Mexico successfully sued NNSA to complete a programmatic environmental impact statement (PEIS). As NNSA's draft Pit Production PEIS itself admits, "Production of pits includes the activities needed to fabricate new pits, modify the internal features of existing pits, and certify new pits or requalify existing pits."⁶³ These admittedly programmatic activities cannot be implemented without the active involvement of the Lawrence Livermore National Laboratory (LLNL), Nevada National Security Site (NNSS), Kansas City National Security Complex (KCNSC), the Pantex Plant. In addition, and most crucially, the Waste Isolation Pilot Plant (WIPP) must be added to this for future disposal (or not!) of radioactive transuranic wastes from future plutonium pit bomb core production. [WIPP is further addressed in the next section of our comments.]

The draft Pit Production PEIS claims that "these sites are not directly involved in pit production activities."⁶⁴ That is simply false. KCNSC will produce non-nuclear components, tooling and other essential elements that are required for pit production and assembly. LLNL and NNSS are involved in certification and testing activities and will see an increase in plutonium handling and transportation because of experimental activities at both sites. NNSS will receive low-level waste from LANL and conduct subcritical experiments for pit certification. Pantex is responsible for handling and shipping plutonium feed material to both LANL and SRS and receiving finished pits for primary assembly. In fact, all these sites are slated to receive increased FY 2027 funding for so-called "Plutonium Modernization."⁶⁵ As the poker saying goes, "Money talks, bullshit walks." That money is direct irrefutable monetary evidence of their programmatic involvement in plutonium pit production.

By including only two sites where production would occur, the draft Pit Production PEIS contributes relatively little beyond existing (and insufficient) site-specific analyses for LANL and SRS. Given NNSA's own chronic lack of a credible cost estimate and an Integrated Master Schedule (both repeatedly recommended by the GAO) and ever escalating costs and delays, NNSA itself would benefit from robust programmatic review and analysis.

Can NNSA claim that there will be no change in impacts, staffing or infrastructure at sites other than LANL and SRS? That obviously cannot be the case. Activities across all sites will undoubtedly result in increased need for material transport, new experimental and certification activities, increased waste streams and new demands on infrastructure. Along with these activities come changes in water, electricity, and fuel use across the complex and in many cases, new construction, added staff and other administrative and engineering requirements. By

⁶³ Draft Pit Production PEIS, NNSA, April 2026, p. S-6.

⁶⁴ Ibid., p. S-3.

⁶⁵ See "Plutonium Modernization" budget category for all these sites in DOE's FY 2027 *Laboratory Tables*, <https://www.energy.gov/documents/doe-fy-2027-laboratory-tables>. Also known as "Enterprise Pit Production Support," LLNL is slated to get an 100% increase from \$88 million in FY 2026 to 167 million in FY 2027; KCNSC \$14 million to \$55 million; NNSS \$12.8 million to \$22.5 million; Pantex \$250,000 to \$510,000.

focusing only on the main production sites, none of these cumulative effects are captured, which is the entire purpose of a programmatic analysis.

Our original court filing that compelled NNSA to produce this draft Pit Production PEIS alleged the following:

“4. The significantly increased pit production capacity is not for the purpose of maintaining the safety and reliability of the existing U.S. nuclear weapons stockpile, but initially for the production of a new warhead known as the W87-1. This new warhead replacement program is connected to, and the driving force behind, the timing and scope of expanded pit production.

Rather than examining the connected programmatic environmental impacts of the W87-1 program, which involves sites other than LANL and SRS – including but not limited to the Lawrence Livermore National Laboratory (“LLNL”) and the Waste Isolation Pilot Plant (“WIPP”) – and involves potential alternatives, cumulative impacts and possible mitigation measures, Defendants have failed to consider all other connected and similar actions in the existing NEPA documents.”

5. The proposed actions of expanding the number of pits to be produced at LANL and repurposing the MOX facility to allow for extensive production at SRS, **along with the W87-1 program impacting several other sites, are “connected,” “cumulative,” and “similar” actions that must be analyzed in a new or supplemental PEIS.**

104. Both LANL and SRS would rely on various NNSA support locations across the country for production, sites that have not been analyzed for environmental impacts. Multiple sites are involved in all aspects of pit production, including critical NNSA staff in Washington, DC, Germantown, Maryland, Albuquerque, New Mexico, as well as at seven field offices. Moreover, **by NNSA’s own admission, multiple contractor-run sites are integral to NNSA’s nation-wide plutonium pit production program, including LLNL, the Kansas City National Security Complex, the Pantex Plant and the WIPP.** See Department of Energy, Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 29-30 (Dec. 2019), <https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>.⁶⁶

In sum, NNSA was forced to complete the Pit Production PEIS by our lawsuit. NNSA restricted analysis in the draft PEIS to just the two main production sites. Therefore, NNSA willfully fails to complete a programmatic EIS and satisfy our lawsuit in the draft PEIS.

Pit Production and the Waste Isolation Pilot Plant

NNSA assumes that the Waste Isolation Pilot Plant (WIPP) will be prioritized for disposal of pit production radioactive wastes. In contrast, the New Mexico state permit requires prioritization of LANL cleanup wastes and that DOE start looking for a new out-of-state dump. WIPP is already oversubscribed for all the radioactive wastes that the Department of Energy wants to dump there. NNSA needs to fully analyze and project plutonium pit waste disposal for the next 50 years.

⁶⁶ COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF, The South Carolina Environmental Law Project, June 29, 2021, bolded emphasis added, https://uploads-ssl.webflow.com/5f2c352f324853b8b51c50db/60db415102377c2070fd3b19_Complaint.pdf

A major vulnerability to the NNSA's overly ambitious plans for expanded plutonium pit production is the uncertainty of future disposal of radioactive transuranic (TRU) wastes and related lack of analysis under the National Environmental Policy Act (NEPA). The only repository for TRU wastes is the Waste Isolation Pilot Plant (WIPP) in southern New Mexico. WIPP is already way oversubscribed for all of the possible TRU wastes that the Department of Energy and NNSA would like to send to it. In addition, legal agreements with the States of Idaho and South Carolina and the relatively new State permit also bind WIPP operations.

Given this, it is not clear where future TRU wastes from plutonium pit production will go in the long term, unless there is an additional repository or WIPP's legal capacity limit is changed by Congress. A senior NNSA official has noted that future disposal of transuranic wastes is the Achilles heel of expanded plutonium pit production.

"Addressing the elephant in the desert, an official with the National Nuclear Security Administration (NNSA) on Wednesday warned that ongoing nuclear-weapon maintenance [code for plutonium pit production] will require a transuranic waste disposal site that is open beyond 2050: the current, best-case availability for the Waste Isolation Pilot Plant in New Mexico.

"From an NNSA perspective, with an enduring mission, we are going to continue to have a need to dispose of transuranic waste past 2050," James McConnell, the National Nuclear Security Administration's associate administrator for safety, infrastructure, and operations, said Wednesday at the Exchange Monitor's virtual RadWaste Summit. "Far and away the biggest challenge for NNSA is to make sure that the disposal system for transuranic waste is robust enough to not become a choke point for our mission," McConnell said."⁶⁷

The Pit Production PEIS must analyze the possibility of not having the Waste Isolation Pilot Plant available (WIPP) for disposal of some or all of the radioactive transuranic (TRU) wastes from plutonium pit production. First, there is the matter of an accident shutting WIPP down for indefinite periods, as happened for nearly three years after an improperly prepared radioactive waste drum from LANL ruptured on Valentine's Day 2014.

The NNSA itself seems unclear how long WIPP needs to be open. According to the 2020 draft Savannah River Site (SRS) environmental impact statement:

"WIPP was originally planned for an operational life of 25 years, followed by closure and post closure phases. In August 2019, DOE released, for stakeholder review and comment, a draft Carlsbad Field Office Strategic Plan based on maintaining WIPP TRU waste disposal operations active through 2050 as needed to support identified TRU waste inventory." (SRS DEIS p. 3-54)

⁶⁷ *Post-WIPP Disposal 'Far and Away' Biggest TRU Waste Challenge for NNSA Pit Mission, Official Says*, Exchange Monitor, September 10, 2020, <https://www.exchangemonitor.com/pit-waste-far-away-biggest-challenge-nnsa-pit-mission-official-says/>

As another 2020 NNSA document put it, “Continued availability of WIPP to dispose TRU waste for the next 50+ years is of the utmost importance to NNSA’s mission. It estimated that by 2038 NNSA will be largest generator of TRU waste.” ⁶⁸

NNSA’s 2019 Final Supplement Analysis of the Complex Transformation SPEIS states:

“Based on current estimates, producing 30 pits per year at LANL and 50 pits per year at SRS could generate a maximum of 1,151 m³ of TRU waste annually (consisting of 107 m³ at LANL and 1,044 m³ at SRS)... The combined TRU waste (1,151 m³) generated over 50 years would be 57,550 m³, which would account for 53 percent of the projected available capacity at WIPP. In addition, **use of WIPP capacity for national security missions such as pit production would be given priority in the allocation process.**” ⁶⁹

First of all, this fundamentally changes WIPP’s mission from cleanup (however poor) of DOE’s nuclear weapons complex to direct support of expanded plutonium pit production. This does not comport with the current New Mexico state permit that requires DOE to prioritize disposal of LANL’s legacy TRU wastes instead of new plutonium pit production wastes.⁷⁰

As more evidence that NNSA may not have WIPP for TRU waste disposal for the long run, the New Mexico State permit also requires:

“...an annual report summarizing its progress toward siting another repository for TRU waste in a state other than New Mexico. The annual report shall summarize the steps the DOE has taken toward siting such a repository in another state and the report shall include documentation supporting the summary.” ⁷¹

Yet more evidence of New Mexico’s increasing resistance to “Forever WIPP” is this additional provision in the State WIPP permit:

“The Secretary [of the New Mexico Environment Department] shall issue a notice of revocation and reissuance for cause within 30 calendar days if, as specified in the Land Withdrawal Act (Pub. L. 102-579, as amended), the volumetric disposal limit for TRU waste of 6.2 million cubic feet at the WIPP facility is increased, or additional types of waste (i.e., other than defense-related TRU waste) are authorized, by federal statute.” ⁷²

⁶⁸ *RadWaste Summit 2020, National Nuclear Security Administration Prioritization Approach*, James J. McConnell, Associate Administrator for Safety, Infrastructure and Operations, September 9, 2020, bolded emphasis and parentheses in the original, <https://srswatch.org/wp-content/uploads/2023/01/Doc-1-Radioactive-Waste-Summit-NA-50-Briefing-Final-9-4-20-2-1.pdf>

⁶⁹ Final Supplement Analysis of the Complex Transformation SPEIS, NNSA, December 2019, page 65, <https://www.energy.gov/sites/default/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>

⁷⁰ DOE shall “prioritize by so certifying the emplacement at WIPP of stored (including buried) TRU mixed waste from the clean-up activities at the Los Alamos National Laboratory (LANL).” Waste Isolation Pilot Plant Hazardous Waste Facility Permit, June 2024, 4.2.1.4 Prioritization and Risk Reduction of New Mexico Waste, parentheses in the original, https://wipp.energy.gov/Library/Information_Repository_A/Searchable_Permit_4ItemPackage_Dec2024_1.pdf

⁷¹ Ibid., 2.14.3 Repository Siting Annual Report

⁷² Ibid., 1.3.1 Permit Modification, Suspension, and Revocation

In short, the Pit Production PEIS should explain in detail how long WIPP needs to be open to accept pit production wastes from LANL and SRS and how NNSA plans to ensure that WIPP will remain open.

DOE Must Analyze the Environmental Impacts of the Agency-Initiated Modification Proposed by the New Mexico Environment Department

On April 23, 2026, the New Mexico Environment Department (NMED) issued a new proposed Draft Permit for the Waste Isolation Pilot Plant (WIPP) that requires a minimum percentage of shipments of legacy waste from the Los Alamos National Laboratory (LANL) to WIPP. This requirement comes as an agency-initiated modification (AIM) pursuant to New Mexico Hazardous Waste Regulations that allow NMED to modify an existing permit upon the receipt of information not available at the time of the issuance of the current Permit. NMED has determined there is sufficient basis for this agency-initiated modification that clarifies the priority to emplace legacy waste and reduces the risk of existing LANL legacy waste. Nuclear Watch New Mexico supports NMED's determination. DOE must state it's plans to comply with this Permit modification.⁷³

These proposed changes would require DOE to ensure that legacy transuranic waste shipments from Los Alamos are at least more than half by volume of the total annual legacy waste shipments from all DOE sites. DOE will likely claim it cannot afford this, even though it is spending \$6 billion this year on nuclear weapons research and production programs at LANL. Plutonium pit production at LANL is slated to get a huge \$1 billion increase in FY 2027 alone, further accelerating the generation of radioactive wastes. DOE must explain the differences in environmental impacts between implementing the agency-initiated modification or not.

The 1992 Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act (Public Law 102-579) transferred 16 sections of land (about 10,240 acres) in southeast New Mexico from the Department of the Interior to the Department of Energy. It officially designated the site as the nation's first deep-geologic repository for defense-generated TRU waste. At this time, there was only Cold War legacy TRU waste. The Rocky Flats Plant had been shut down in 1989 and Congress had not appropriated funding for any new plutonium pit production facility to generate more TRU waste. WIPP was built for legacy TRU waste and that must remain as a priority.

The final Pit Production PEIS must analyze the potential impacts that these AIM requirements might have on future disposal of transuranic wastes from pit production:

- From January 1, 2027, through December 31, 2031, at least 55% of the total volume of all waste emplaced at WIPP from all generator/storage sites must be LANL legacy waste.

⁷³ <https://www.env.nm.gov/hazardous-waste/wipp/>

- Beginning January 1, 2032, and until all LANL legacy waste has been deposited at WIPP, LANL legacy waste must be at least 75% of the total volume of waste emplaced from all generator/storage sites.
- Legacy waste currently stored aboveground at LANL Material Disposal Area G shall be shipped and emplaced at WIPP by July 1, 2028.
- If at any point any of these conditions are not met, all generator/storage site shipments (with the exception of LANL) must cease until all deficiencies are cured.
- An annual report, due by April 30 of each year, for each generator/storage site and for both legacy and non-legacy waste, shall detail information needed to demonstrate prioritization of LANL legacy waste and compliance with the requirements of this Permit section.

DOE should support getting all aboveground TRU wastes out of Area G by July 1, 2028. We believe this is of growing importance given New Mexico's increasing aridity and probability of catastrophic wildfires. This is not hypothetical given that the 2000 Cerro Grande Fire burned to within a half mile of Area G, which could have been truly catastrophic had respirable plutonium been released.

Plutonium pit production is NNSA's most expensive program ever, with \$6 billion to be spent over each of the next six years⁷⁴ and at least \$60 billion over the next 20 years. NNSA has officially and formally stated that 53% of WIPP's remaining capacity will be reserved for future pit production wastes.⁷⁵ This is obviously in direct opposition to NMED's position that Cold War legacy wastes at LANL must be prioritized. The final Pit Production PEIS must fully resolved this conflict with a credible plan for disposal of future transuranic plutonium pit production wastes within its stated period of analysis, which is until at least 2075.

NMED's AIM incorporates additional requirements because DOE didn't do what it agreed to in the 2023 WIPP Permit. Under 40 C.F.R. § 270.41(a)(2)1, a permit may be modified only if: (1) information was unavailable at issuance; and (2) it would have justified different conditions at that time. The new information is that DOE did not prioritize disposal of LANL waste at WIPP, as it had previously agreed to.

The draft Permit defines "Projected Waste" as:

⁷⁴ See NNSA's FY 2027 Congressional Budget Request, PDF pages 18-20, <https://www.energy.gov/documents/doe-fy-2027-volume-1-wa>. Those budget figures include plutonium pit production at both LANL at the Savannah River Site (SRS). The independent Government Accountability Office has repeatedly stated that NNSA has no credible cost estimate for pit production.

⁷⁵ Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, NNSA, December 2019, <https://www.energy.gov/sites/default/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>, page 65.

The part of the Annual Transuranic Waste Inventory Report (ATWIR) inventory that has not been generated (does not physically exist) but is estimated to be generated at some time in the future by the TRU waste generator/storage sites. TRU waste in projected waste streams includes waste from programs that have not come on-line as of the data cutoff date for the 2025 ATWIR report, as well as waste from ongoing projects and decontamination and decommissioning (D&D) waste that has not yet been packaged. (1.5.23)

To fully account for all future Projected Waste so that comprehensive cleanup can be properly planned, NukeWatch believes that all buried TRU at LANL should be credibly estimated and included in the Annual Transuranic Waste Inventory Report.

We have repeatedly pointed to the need to have all buried TRU wastes at LANL credibly estimated since DOE ignores much buried TRU waste in its own limited inventories. This is important because DOE officials claim that WIPP is about 40% full toward its statutory cap of 6.2 million cubic feet of waste. This leaves 3.7 million cubic feet remaining (or 137,000 cubic yards).

LANL's Corrective Measures Evaluation (CME) for Material Disposal Area G estimated that there is 54,536 cubic yards of buried TRU in several pits.⁷⁶ This is 40% of the 137,000 cubic yards of space remaining at WIPP. There is simply not enough space at WIPP for all the legacy TRU waste across the nation.

WIPP is Already Over Subscribed

It is questionable whether WIPP will have the capacity to dispose of NNSA's projected TRU wastes from plutonium pit production. This section concerns other streams of TRU wastes that DOE wants to send to WIPP.

The National Academy of Sciences states that the large volumes involved are as follows: ⁷⁷

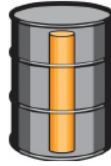
⁷⁶ https://nukewatch.org/oldsite/importantdocs/resources/Area_G_Pit_Totals_from_CME_rev3_Sept-2011.pdf. More detail of the types of Area G wastes compiled from the MDA G Corrective Measures Evaluation are available at <https://nukewatch.org/oldsite/importantdocs/resources/AGCME-inventories.pdf>. The MDA G CME mentions TRU and plutonium in several pits and shafts but lacks exact estimates of amounts.

⁷⁷ *Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant* (2020), NAS, page 30, <https://www.nationalacademies.org/ocga/briefings-to-congress/review-of-the-department-of-energys-plans-for-disposal-of-surplus-plutonium-in-the-waste-isolation-pilot-plant>

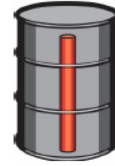
BOX 2-3 Continued



(a)



(b)



(c)

Characteristics	(a) Direct-loaded	(b) Pipe Overpack Container	(c) Criticality Control Container/Criticality Control Overpack (CCC/CCO)
Inner dimension	N/A	12-inch-diameter pipe	6-inch-diameter pipe
Physical volume	0.21 m ³	0.21 m ³	0.21 m ³
Inner container volume	0.21 m ³	0.046 m ³	0.013 m ³

BOX FIGURE 1 Graphical illustration of the three types of 55-gallon drums approved for disposal of TRU waste at WIPP with information on the physical volumes (outer container volume) and inner container volumes affected by the volume of record decision. (a) A standard sized, direct-loaded 55-gallon drum, (b) a pipe overpack container which has a 12-inch pipe centered within a 55-gallon drum, and (c) the criticality control overpack which has a 6-inch-diameter pipe (the criticality control container) centered in a 55-gallon drum.

SOURCE: Committee-generated with information from (p. 20): https://www.wipp.energy.gov/library/WDS/DOE-WIPP-09-3427_Rev_17.pdf (accessed April 21, 2020).

The dilute and dispose plan would produce approximately 160,666 CCOs (based on a total of 48.2 MT of surplus plutonium and 300 FGE per CCC)—more than the number of 55-gallon drums currently emplaced in WIPP. The LWA volume for the DSP-TRU waste, using the numbers above, would be 2,057 m³ while the TMW volume would be 33,740 m³—a factor of 16 larger.

^aOther types of POCs are used, but the 12-inch POC is the most prevalent.

^bOnly 58 POCs used a 6-inch-diameter inner pipe; the remainder used the 12-inch POC.

In addition, DOE has long sought to reclassify high level wastes at Hanford and send them to WIPP. This even resulted in a permit modification by NMED that barred those wastes.⁷⁸ If DOE has agreed to not seek to change that permit provision, it should so state in the Pit Production PEIS and other DOE documents.

Yet another major plutonium waste stream could be created by the Virtual Test Reactor. Its final environmental impact statement (EIS) states:

"The Waste Isolation Pilot Plant (WIPP) is currently the only disposal option for defense TRU waste. WIPP's Land Withdrawal Act total TRU waste volume limit is 175,564 cubic meters. As of April 3, 2021, 70,115 cubic meters of TRU waste were disposed of at the WIPP facility. TRU waste volume estimates such as those provided in NEPA documents, cannot be used to determine compliance with the WIPP Land Withdrawal Act TRU waste volume capacity limit."⁷⁹

⁷⁸ *Environment Department Takes Action to Prohibit High-Level Sludge from WIPP Disposal*, NMED, October 29, 2004, https://www.env.nm.gov/wp-content/uploads/sites/12/2019/10/HLW_Approval_PR.pdf WIPP Permit 2.3.3.8 Excluded Waste.

⁷⁹ VTR final EIS, NNSA, May 2022, page S-41, <https://www.energy.gov/sites/default/files/2022-05/final-eis-0542-versatile-test-reactor-summary-2022-05.pdf>

As the 2020 National Academy of Sciences Report determined, present and possible future TRU waste amounts at WIPP, not including possible Versatile Test Reactor waste, exceed the legal capacity, even using the Volume of Record calculation, as illustrated here:⁸⁰

The committee was asked to review additional TRU waste streams and to assess DSP-TRU waste's potential impact on them as well as the impact on LWA capacity limits. To reassess these impacts against the new volume of record (VoR) calculations, the committee updated the volumes of specific waste streams noted in its Interim Report: Greater-Than-Class-C-like wastes, tank wastes, and TRU waste generated by pit production. Recent DOE-reported volumes for emplaced and future TRU wastes were used (DOE-CBFO, 2018a, 2019a; see Table 3-2). The results shown in Figure S-5 highlight two main issues:

- Under the VoR recalculation, the LWA volume of the DSP-TRU waste generated by processing 48.2 MT of surplus plutonium is reduced from 33,740 m³ to 2,056 m³, which is approximately 1 percent of the LWA capacity, yet the physical volume is substantial (approximately the physical space of two panels); and
- When additional TRU wastes volumes are taken into account, the LWA capacity will still be challenged—primarily due to initial estimates with potentially large uncertainties of TRU waste from pit production.

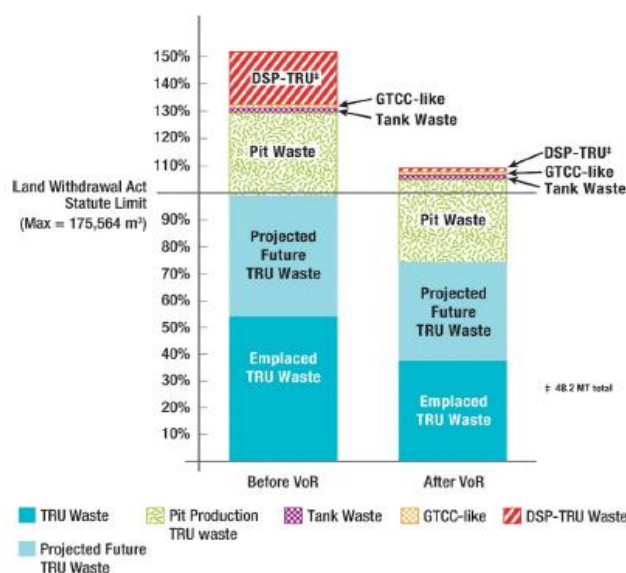


FIGURE S-5 DOE-reported emplaced and future transuranic wastes estimates (DOE-CBFO, 2018a, 2019a) and additional wastes, identified by the committee. Additional wastes are DSP-TRU, Greater-Than-Class-C-like (GTCC-like) TRU wastes, tank wastes, and TRU waste generated from pit production. The graphs illustrate the impact of the volume of record (VoR) recalculation, in particular the large reduction in DSP-TRU waste volumes. Both graphs also show that the Land Withdrawal Act statutory limit is likely to be exceeded. DSP-TRU volumes have been subtracted from TRU waste estimates. See Table 3-2.

Acronyms:

DSP-TRU = TRU wastes generated by processing excess plutonium for disposal at

CBFO = DOE Carlsbad Field Office which oversees the Waste Isolation Pilot Plant (WIPP)

GTCC = Greater-Than-Class-C radioactive wastes are wastes generated by licensees of the Nuclear Regulatory Commission, which is to say commercial nuclear energy.

LWA = WIPP's Land Withdrawal Act that set its legal limit

TRU = radioactive transuranic wastes, primarily produced from using plutonium to fabricate nuclear weapons

VoR = Volume of Record being contested by the Southwest Research and Information Center and Nuclear Watch New Mexico

⁸⁰ Ibid., p. 6.

To conclude, the Pit Production PEIS must fully explain and justify how the NNSA can guarantee that the Waste Isolation Pilot Plant will be available for disposal of its plutonium pit production transuranic wastes.

The Pit Production PEIS Must Also Address these NMED WIPP-related Issues

To demonstrate that WIPP has the capacity and capability of disposing LANL's future plutonium pit production wastes, the Pit Production PEIS must address these issues that the New Mexico Environment Department has formally commented on.

NMED commented on NNSA's 2020 Savannah River Site, Draft Environmental Impact Statement for Plutonium Pit Production. It stated:

“Department of Energy (DOE) and National Nuclear Security Administration (NNSA) did not disclose, discuss and/or quantify various environmental legal matters that could have a material impact on its Proposed Action...

Additionally, the April 2020 draft EIS does not discuss the November 2019 settlement between the DOE and the State of Idaho related to Idaho National Laboratories and the associated impacts of how the DOE prioritizes shipments and emplacement at WIPP. The total volume of emplaced and future waste shipments is expected to exceed the legislated volume capacity for WIPP (National Academy of Sciences Review of Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant, April 2020). The Idaho Settlement allocates fifty-five percent (55%) of all TRU waste shipments received at WIPP for Idaho. Depending on how the DOE prioritizes future waste shipments across the complex, other facilities around the U.S., including LANL, will need to store remediated legacy waste and/or delay remediating legacy waste. The State of New Mexico objects to the DOE prioritizing defense waste over remediating and emplacing legacy contamination at the WIPP, particularly in the state that hosts and regulates the WIPP. The DOE and NNSA failed to disclose, discuss and/or quantify various environmental legal matters that will have a material impact on legacy contamination and risk to communities...

The DOE and NNSA failed to quantify the risk, impacts, and costs associated with the successful emplacement of SRS wastes at the WIPP in the draft EIS...

The draft EIS fails to demonstrate that the Proposed Action will achieve environmental justice for the high percentage of minority and low-income populations in the State of New Mexico that have already suffered disproportionately high adverse human health and environmental effects of U.S. Department of Energy programs...

The disposal of SRS TRU waste at the WIPP site must conform to the following requirements:

- a. Future waste streams must meet requirements in the DOE WIPP Waste Acceptance Criteria, the WIPP Hazardous Waste Facility Permit Waste Analysis Plan, and the WIPP Transportation Safety Plan Implementation Guide;
- b. DOE must adhere to the limits on types and quantity of waste imposed by the 1992 WIPP Land Withdrawal Act, as amended by Public Law No. 104-201 (1996); and

c. Legacy waste, particularly from LANL, must remain a high priority for disposal at the WIPP.⁸¹

Note that “b” is important because WIPP is already way oversubscribed for disposal of all TRU wastes that DOE is considering. Concerning “c”, DOE is not prioritizing legacy wastes from LANL. Instead legacy wastes from Idaho and non-legacy waste from South Carolina and future plutonium pit production wastes are being prioritized.

NMED commented on NNSA’s May 2020 Supplemental Analysis of the 2008 LANL Sitewide Environmental Impact Statement:

Further, the March 2020 draft supplemental analysis of the 2008 SWEIS does not discuss the November 2019 settlement between DOE and the State of Idaho related to Idaho National Labs. In that settlement, DOE agreed to allocate fifty-five percent (55%) of all transuranic waste shipments received at the Waste Isolation Pilot Plant (WIPP) for Idaho National Labs. By prioritizing waste shipped from the State of Idaho to the WIPP, DOE will need to store remediated legacy waste at LANL and/or delay remediating legacy waste at LANL or both. DOE and NNSA did not address this risk which contradicts the conclusion that there is “no significant new circumstances or information relevant to environmental concerns. DOE and NNSA failed to account for these settlements or explain the impacts from these settlements in the draft EIS and the overall conclusion...”

9. Increased pit production will generate extra waste and DOE and NNSA will likely have to request permit modifications to increase their hazardous waste storage capacity. Section 3.3.5, page 55 indicates that low level waste and chemical waste will exceed the 2008 SWEIS estimates for the plutonium facility but not for the entire facility. DOE and NNSA will need extra storage capacity at TA-55 and NMED approved the permit modification request in May 2017. Increased pit production will generate extra waste and DOE and NNSA may have to request permit modifications to increase their hazardous waste storage capacity. Mixed waste is currently stored at LANL beyond the one-year storage allowed by the federal Resource Conservation and Recovery Act (RCRA) under a Federal Facility Compliance Order, Site Treatment Plan. The increased pit production will result in generation and storage of more mixed waste at LANL than currently present.

12. ... The disposal capacity limits at WIPP are defined by several different laws, agreements, and permits intended for the purpose of regulating both the physical space as well as the physiochemical and radiological aspects of transuranic (TRU) and hazardous waste disposal. The WIPP Land Withdrawal Act (LWA) limits TRU waste disposal capacity to no greater than 6,200,000 ft³ (175,564 m³) of defense related TRU waste, a limit that is overseen by the USEPA. The Record of Decision (ROD) for the WIPP limits the amount of remote handled TRU (RH TRU) waste in the WIPP to no more than 250,000 ft³ (7,079 m³) of the LWA total. In the National Academies of Sciences Engineering and Medicine (NAS) Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant (2020), the report identifies 48.2 metric tons of surplus plutonium that is under consideration or slated for disposition at the WIPP. Based on the current LWA statute limit and on the waste volume decision (currently under appeal in the New Mexico Court of Appeals) the waste exceeds the authorized volume of waste allowed in the WIPP.⁸²

⁸¹ NMED, May 2020, <https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-18-NEPA-EIS-Savannah-River-Plutonium-Pits-Final.pdf>

⁸² NMED, May 9, 2020, <https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-09-OOTS-NEPA-Review-LANL-Sitewide-EIS-Supplemental-Analysis-Final.pdf>

NMED commented on NNSA's September 2020 Notice of Intent for a Lawrence Livermore National Laboratory (LLNL) SWEIS. It stated:

The SWEIS must include a description of the radionuclides and activities of waste that will be transported to New Mexico for disposal at WIPP, along with anticipated changes in waste generation and disposal that will result from the Proposed Action.⁸³

NMED also commented:

“Action Alternatives in the SWEIS that involve transporting material from LLNL to New Mexico must ensure any action will achieve environmental justice for the high percentage of minority and low-income populations in the State of New Mexico. These populations have already suffered disproportionately high adverse human health and environmental effects from nuclear energy and weapons programs of the United States.”

In October 2020 NMED commented to the Savannah River Site Site-Specific Advisory Board:

1. DOE/National Nuclear Security Administration (NNSA) publicly stated plans to dilute and dispose of non-pit plutonium waste. DOE/NNSA plans to dispose of this waste at the Waste Isolation Pilot Plant (WIPP) facility in Carlsbad, New Mexico. However, DOE/NNSA has not yet discussed the regulatory implications of such plans with NMED nor satisfied the approval conditions of its Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permit issued by the State of New Mexico. The State of New Mexico requests that the EM SSAB carefully consider the ramifications of the incomplete analysis of the proposed final disposition pathway for this waste.

On December 24, 2015, DOE/NNSA announced in the Federal Register, 80 Fed. Reg. 80,348, that its preferred alternative for disposition of the 6 metric tons (MT) of non-pit plutonium was the dilution/downblending of the waste at SRS and disposal at WIPP, located near Carlsbad, New Mexico, otherwise known as the “WIPP Disposal Alternative.” At that time, DOE/NNSA did not state a preferred alternative for dispositioning the associated 7.1 MT of pit plutonium. In its April 5, 2016 Record of Decision, 81 Fed. Reg. 19,588, DOE/NNSA announced its decision to implement their preferred alternative for the disposition of 6 MT of non-pit plutonium as contact-handled transuranic (CH-TRU) waste for disposal at WIPP. A disposition path for the 7.1 MT of pit plutonium was not decided at this time.

On July 23, 2020, DOE/NNSA announced that SRS had resumed plutonium downblending. In its press release, DOE/NNSA stated that “Plutonium downblending is the process of mixing plutonium oxide with a multicomponent adulterant. After downblending, the plutonium will be shipped to the Waste Isolation Pilot Plant in New Mexico for disposal.”

On August 28, 2020, DOE/NNSA issued an amended decision in the Federal Register, 85 Fed. Reg. 53,350, stating that it will now dispose of an additional 7.1 MT of pit plutonium as CH-TRU waste at the WIPP facility. According to DOE/NNSA, the process would be the same as described for the 6 MT of non-pit plutonium that DOE/NNSA had previously delineated for disposal at WIPP. Conversion to oxide may be performed at either Los Alamos National Laboratory (LANL) or at SRS.

⁸³ NMED, September 2020, <https://www.env.nm.gov/wp-content/uploads/2020/05/2020-08-25-OOTS-NEPA-Lawrence-Livermore-NL-Intent-to-Prepare-Sitewide-EIS-draft.pdf>

DOE Environmental Management must satisfy the requirements in NMED's Hazardous Waste Facility Permit, Part 2 and Attachment C, in order for this waste to be eligible for disposal at the WIPP facility. To date, it has not specifically been articulated how DOE Environmental Management will ensure compliance with the Permit's Waste Acceptance Criteria. DOE must engage with NMED to demonstrate such waste will meet the WIPP Waste Acceptance Criteria.”⁸⁴

The Pit Production PEIS must fully explain and justify how the NNSA is addressing these additional NMED WIPP-related issues.

Cost of plutonium pit production

According to the Government Accountability Office, the NNSA has no credible cost estimates for expanded plutonium pit production, its most complex and expansive program ever. Why? This is particularly egregious when DOE and the NNSA (and its predecessors) have been on the GAO's "High Risk List" for project mismanagement and waste of taxpayers' dollars since 1991.

The MOX Fuel Fabrication Facility (MFFF) at SRS cost American taxpayers ~\$7 billion for nothing. NNSA's repurposing it into the Savannah River Plutonium Processing Facility was originally estimated to cost \$4.1 billion and is now \$11 billion and climbing. Hot operations are not expected to begin until the mid-2030s. So, what is LANL's congressionally required plan for picking up the slack from the Savannah River Plutonium Processing Facility in the event of continuing delays?

NNSA's original cost estimates in 2018 for expanded plutonium pit production over 30 years was \$43 billion. With typical costs overruns, we are now betting that pit production will cost at least \$60 billion over the next 25 years. And yet another issue that would help to solidify estimated costs for pit production is that NNSA must develop an Integrated Master Schedule between the programmatic sites, which GAO has long advocated for.⁸⁵

In March 2025 we met with high-level NNSA officials in Washington, DC. One of them mentioned that the Uranium Processing Facility was one of the agency's best projects. We burst out in spontaneous laughter, after which the NNSA official sheepishly said that it's all relative.

Yes, it's relative all right. UPF is one of NNSA's "best" projects after it was stripped of all non-production missions, rebaselined twice, nevertheless busted its promised \$6.5 billion budget cap, and three old contaminated facilities that the UPF was supposed to replace are now expected to continue operations into the 2040s.

NNSA drastically needs to clean up its fiscal house and finally produce credible cost estimates. In our opinion, when the Department of Energy doesn't want to do something, it highballs the cost estimates. When it wants to do something, it intentionally lowballs cost estimates to suck Congress into appropriations. This does a real disservice to the American taxpayer. We can rattle

⁸⁴ NMED, October 22, 2020, <https://www.env.nm.gov/wp-content/uploads/2020/05/2020-10-22-NMED-SRS-CAB-Comments-Final.pdf>

⁸⁵ See Nuclear Weapons: NNSA Should Further Develop Cost, Schedule, and Risk Information for the W87-1 Warhead Program, GAO, September 2020, at <https://www.gao.gov/products/gao-20-703>

off a dozen DOE/NNSA projects and programs that have exceeded initial cost estimates by an order of magnitude.

Even if one is in favor of pit production, there is no need to rush it before NNSA gets it right. The new Sentinel intercontinental ballistic missile is seriously delayed because of drastically increasing costs. LANL's planned new pits are for the W87-1 warhead for the Sentinel ICBM. The Pit Production PEIS should analyze slowing down planned pit production even beyond the delays it is already experiencing with a focus on resolving all the issues brought up in these comments and more.

DOE Secretary Chris Wright is reported to have said, "We've built one [pit] in the last 25 years, and we'll build more than 100 during the Trump administration." First, he is incorrect because LANL produced 29 W88 pits during 2007-2011 to complete the production run that was abruptly halted by the 1989 FBI raid investigating environmental crimes at the Rocky Flats Plant near Denver.

But the relevant point here is that DOE Secretary Wright said 100 pits will be manufactured during the Trump Administration, which assuming no unconstitutional third term would end January 20, 2029. Acting NNSA Administrator Teresa Robbins stated in January that LANL would have the "capability" to make 30 pits per year "in or near 2028."⁸⁶ The Savannah River Site won't be able to produce new pits until the mid-2030s. It is almost impossible that LANL could produce 100 pits in that brief time. Nevertheless, the Pit Production PEIS should explain and provide comprehensive background on the DOE Secretary's projection and justify how that can be safely done.

Indications are that just preparing facilities for plutonium pit production at LANL will cost \$25 billion and at SRS more than \$30 billion, making the Savannah River Plutonium Processing Facility the most expensive building in U.S. history. None of this includes actual production nor all related costs by any means. It definitely does not include related programmatic costs at the Lawrence Livermore National Laboratory, Nevada National Security Site, the Kansas City National Security Complex and the Pantex Plant.

Here we refer back to our previous section on NEPA compliance:

2. A Department of Energy "Special Study" on NNSA leadership and management of its troubled plutonium pit production program, scheduled for completion in December 2025.⁸⁷ That Study is expected to be critical of the new pit production plant at the Savannah River Site (SRS) in South Carolina, which will be the most expensive building in US history (\$30 billion-plus). DOE has not released this Special Study

⁸⁶ *EnergySec tells Fox News he wants to build 'more than 100' pits*, Exchange Monitor, April 4, 2025 <https://www.exchangemonitor.com/energysec-tells-fox-news-he-wants-to-build-more-than-100-pits-2/>

⁸⁷ See "Special Study of the National Nuclear Security Administration's (NNSA's) Leadership and Management of the Plutonium Pit Mission," ordered by DOE Deputy Secretary James Danly on August 11, 2025, <https://nukewatch.org/wp-content/uploads/2026/01/DOE-Special-Study-NNSA-Leadership-Mgmt-Plutonium-Pit-Production-Mission-Ltr-11Aug2025.pdf>

despite requests by Members of Congress and public Freedom of Information Act requests.

We have FOIAed for that document. Senator Elizabeth Warren and Rep. John Garamanedi have demanded that Special Study. It may have direct bearing on the Multi-Site and Single Alternatives in the draft Pit Production PEIS as to whether plutonium pit production is feasible and/or affordable at SRS at all. The final Pit Production PEIS needs to answer the question, what is DOE and NNSA hiding by covering up this document?

DOE and NNSA have a long history of not discussing costs in NEPA processes. However, in our view, it is imperative that the Pit Production PEIS discusses costs because they may well drag the entire program down, if not terminate major portions of it (for example pit production at the Savannah River Site).

Area C

In September 2023 the New Mexico Environment Department (NMED) issued a draft order to DOE to comprehensively clean up an old radioactive and toxic waste dump known as Area C.⁸⁸ Nuclear Watch New Mexico submitted formal comments and requested a public hearing on the issue. As such, we have been a party to the subsequent proceedings.

In June 2025 DOE Environmental Management Los Alamos notified NMED that Area C was “associated with active Facility operations and will be Deferred from further corrective action under the Consent Order until SWMU 50-009 [Area C] is no longer associated with active Facility operations.”⁸⁹ NMED and DOE have been at loggerheads ever since, with Nuclear Watch New Mexico generally supporting the Environment Department’s position.

In February 2026 NMED issued an Administrative Compliance Order requiring DOE to submit documentation to support its request to defer the cleanup of MDA-C.⁹⁰ On July 1, 2026, DOE and N3B entered a Motion to Dismiss, saying they:

“...respectfully move the Hearing Officer and the Secretary of Environment (“Secretary”) for an order (a) dismissing the Administrative Compliance Order, HWB-26-02 (the “ACO”), signed February 11, 2026 and issued by the Resource Protection Compliance and Enforcement Bureau (“RPCEB”) of the New Mexico Environment Department (“NMED”); and (b) vacating any hearing on the ACO.”⁹¹

⁸⁸ *STATEMENT OF BASIS, SELECTION OF A REMEDY FOR CORRECTIVE ACTION AT MATERIAL DISPOSAL AREA C, SWMU 50-009 AT TECHNICAL AREA 50, LOS ALAMOS NATIONAL LABORATORY, LOS ALAMOS, NEW MEXICO EPA ID NO. NM08990010515*, NMED, September 7, 2023, https://www.env.nm.gov/wp-content/uploads/sites/10/2023/09/HWB_LANL_MDA-C-Statement-of-Basis.pdf

⁸⁹ *Deferment of Corrective Action Activities for Solid Waste Management Unit 50-009 at Material Disposal Area C under the 2016 Compliance Order on Consent, as Revised in 2024*, DOE to NMED, June 18, 2025, <https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-9-Deferment-of-Corrective-Action-Activities-for-Solid-Waste-Management-Unit-50-009.pdf>

⁹⁰ New Mexico Environment Department Administrative Compliance Order HWB-26-02, February 11, 2026, <https://www.env.nm.gov/wp-content/uploads/2026/02/2026-02-11-LANL-MDA-C-ACO.pdf>

⁹¹ RESPONDENTS UNITED STATES DEPARTMENT OF ENERGY AND NEWPORT

As justification Respondents state:

On September 7, 2023, NMED issued a Statement of Basis for MDA C in which NMED selected, contrary to DOE's recommendation, full excavation of all 115 disposal units as the proposed remedy. Excavation would generate substantial truck traffic, equipment staging, and other surface disturbance immediately adjacent to TA-55's pit production operations. Triad National Security, LLC, the Management and Operating Contractor for LANL on behalf of DOE's National Nuclear Security Administration ("DOE-NNSA"), raised significant concerns about the impact of the proposed excavation remedy on the pit production mission, informing EM-LA and N3B that the pit production mission would be adversely impacted by any remediation activities at MDA C, with impacts most significant under the excavation alternative because of MDA C's proximity to pit production facilities.⁹²

MDA C's proximity to pit production facilities, specifically LANL's main plutonium facility "PF-4," is not in dispute. They are approximately 800 feet from their closest point to each other. In addition, plutonium pit production employees must park on the south side of Parajito Road and walk by Area C to gain access to PF-4.

However, Nuclear Watch New Mexico contends that simple proximity with "substantial truck traffic, equipment staging, and other surface disturbance" is not enough to justify Respondents' Motion to Dismiss. Nor is it enough to justify DOE's overarching rationale that Area C is "associated with active Facility operations," especially when alternatives could and should be explored. First, it is not disputed that Area C itself is inactive as it last received radioactive and toxic wastes in 1974 and is not slated to receive more. Therefore, DOE and N3B are relying solely upon Area C's proximity to PF-4 to declare it associated with active facility operations. However, proximity by itself is not an objective rationale. There are many locations at LANL that have different ongoing operations in close proximity.

Completely lacking is any discussion of a possible alternative transportation route beginning at the east side of Area C and extending all the way to NM HWY 4 between White Rock and the "Y" intersection, all of which is apparently under LANL and DOE/NNSA control.

To cut to the quick, DOE and NNSA need to fully justify how Area C is "associated with active Facility operations" in the final Pit Production PEIS. This is crucial to us as we believe that Area C, which is relatively small and shallow, should be the model for cleanup at the rest of the Lab. This contrasts with DOE's and LANL's plans to cap and cover some half-million cubic yards of existing toxic and radioactive wastes, leaving them permanently buried as a perpetual threat to groundwater.

For more on Area C, see our fact sheet *The Future of Los Alamos Lab: More Nuclear Weapons or Cleanup?* at <https://nukewatch.org/wp-content/uploads/2026/02/Area-C-Fact-Sheet-2-27-26.pdf>, which we incorporate here.

NEWS NUCLEAR BWXT-LOS ALAMOS, LLC'S MOTION TO DISMISS FOR FAILURE TO STATE A CLAIM, DOE and N3B, July 1, 2026, p. 1.

⁹² Ibid., pp. 11-12

Worker and Public Safety and the Defense Nuclear Facilities Safety Board

The Defense Nuclear Facilities Safety Board, whose access and functionality the DOE and NNSA have repeatedly tried to hinder, has been indispensable in its reporting on nuclear safety incidences across the nuclear weapons complex.

NNSA calculated potential doses to workers and the public are inevitably orders of magnitude lower than those calculated by the independent Safety Board (some of which are lethal doses).⁹³ This is of natural concern because as the draft LANL SWEIS stated, “Under normal operations, public radiation doses would occur from airborne releases from continued operations.” (Volume 1, PDF page 323). Those public radiation doses are bound to increase with expanded plutonium pit production.

In one particular case of high potential doses to the public:

“NNSA Headquarters accepted an “exigent condition” where there is no viable control strategy to meet DOE’s evaluation guideline for postulated consequences to the public. In this case, NNSA accepted bounding mitigated consequences to the public that range from 490 to 3,175 rem depending on the amount of radioactive material assumed to leak out of the building structure following a post-seismic fire. NNSA deemed the risk acceptable based on the conservatism in the analysis, the low likelihood that the accident occurs, and the limited number of shipments. The primary controls credited to protect the public are the shipping containers (which must be received by May 2024 before certifications expire) and the seismic power shutoff system (which has an acknowledged deficiency and cannot prevent all fire ignition sources following an earthquake). Work associated for this activity will be primarily performed in four gloveboxes where only one of the gloveboxes meets minimum seismic requirements.”⁹⁴

Thus, clearly NNSA is more than willing to risk the health and well-being of its workers and the public in pursuit of its missions, and plutonium pit production is its declared number one mission. Risk analysis is at the heart of NEPA. This mismatch between the NNSA’s and the Safety Board’s potential dose calculations urgently needs to be reconciled in the final Pit Production PEIS.

LANL’s chronic history of nuclear safety incidences needs analysis and resolution before expanding plutonium pit production. These concerns are serious enough that major operations at LANL’s main plutonium facility (PF-4) were halted for more than three years, yet nuclear safety incidences still occur. Further, a Defense Nuclear Facilities Safety Board report noted that approximately one third of Lab criticality evaluations reviewed were noncompliant with analysis

⁹³ See Table 1, page 10 of the Defense Nuclear Facilities Safety Board’s report *Potential Energetic Chemical Reaction Events Involving Transuranic Waste at Los Alamos National Laboratory* at <https://www.dnfsb.gov/documents/reports/technical-reports/potential-energetic-chemical-reaction-events-involving> It gives lethal potential occupational doses of 760 rem and public doses of up to 24 rem.

⁹⁴ *Los Alamos Activity Report for Week Ending April 1, 2022*, DNFSB, <https://www.dnfsb.gov/sites/default/files/document/25541/Los%20Alamos%20Week%20Ending%20April%201%202022.pdf> Parentheses in the original.

and documentation requirements defined in DOE-STD-3007. The impacts of and rigorous avoidance of criticality accidents must be analyzed in the final PEIS.

The long track record of chronic nuclear criticality incidences at LANL has become publicly known primarily through the reporting of the Defense Nuclear Facilities Safety Board (DNFSB). In what was arguably an attempt to kill the messenger DOE issued its Order 140.1 Interface with the Defense Nuclear Facilities Safety Board.

As the Board itself observed:

“...DOE Order 140.1, Interface with the Defense Nuclear Facilities Safety Board, issued in May 2018, threatens to undermine the Board’s ability to execute its statutory mission under the Atomic Energy Act. DOE Order 140.1 improperly attempts to diminish the Board’s statutory mandate in four principal ways, all of which are inconsistent with the text of the Atomic Energy Act:

- The Order contains a narrow definition of “Public Health and Safety,” which only includes individuals located outside of DOE site boundaries (i.e., excluding onsite individuals and workers);
- The Order provides exemptions allowing DOE and contractors to not provide access to facilities that DOE determines do not have the potential to adversely affect public health and safety, which could limit Board oversight at many defense nuclear facilities;
- The Order lacks a clear provision to provide the Board with ready access to such information, facilities, and personnel as the Board considers necessary to carry out its responsibilities; and
- The Order provides an allowance for DOE to deny Board requests for relevant deliberative and pre-decisional information.”

The last point in particular strikes at the heart of potential risks that the public may be exposed to by expanded plutonium pit production at both LANL and SRS. The Safety Board is the only independent entity that can review and comment on NNSA facility planning before those plans are made final. The DOE attempt to bar the DNFSB from ostensibly “deliberative and pre-decisional information”—apparently designated as such unilaterally by DOE without any prospect for appeal or review—could directly lead to pit production facilities lacking the safety provisions and requirements that would make the public safer.

Fortunately, in the face of public and congressional pressure, DOE rescinded Order 140.1. But this bears remembering as the NNSA aggressively expands plutonium pit production and the Safety Board faces possible cutbacks.

DOE/NNSA’s degradation of safety even as it plans to ramp up plutonium pit production appears to be systematic. As the Safety Board noted:

“DOE has begun the process to revise 10 CFR Part 830, Nuclear Safety Management, which has served as the cornerstone of its regulatory framework to ensure adequate protection of public health and safety... Overall, the Board is concerned that the proposed revision to 10 CFR Part 830 will make it more difficult for the Department to exercise consistent oversight across the complex and loosens requirements upon which DOE and the public rely to ensure adequate protection of public health and safety. The Board identified concerns with DOE’s proposal to remove the requirement for DOE to annually review and approve changes to documented safety

analyses. The Board found that DOE's proposed change, if implemented, created a potential for the safety basis and facility operations to drift outside the envelope approved by DOE.”⁹⁵

This is again directly relevant to the risks posed to the public by plutonium pit production at both LANL and SRS. LANL's PF-4 has long had a bad track record of insufficient and/or outdated safety bases. The removal of the requirement to annually review and approve changes could directly threaten the public. In short, the final Pit Production PEIS needs to fully review the risks posed by plutonium pit production to the public by apparent systemic attempts by DOE to degrade institutional safety and independent review of safety.

A 2009 DNFSB recommendation stated:

“Consistent with the Board's Recommendation 2004-2, Active Confinement Systems, one long-term strategy that could provide effective mitigation for seismic events involves upgrading the facility's confinement ventilation system to meet seismic performance category 3 criteria. This strategy would allow the confinement ventilation system to reduce reliably the consequences of a seismically induced event by many orders of magnitude to acceptably low values.”⁹⁶

In March 2022, NNSA stated that they are no longer pursuing a safety class active confinement system at PF-4.⁹⁷ Basically, active confinement systems would automatically close doors and turn off, or on, exhaust fans during an accident. This would contain the radiologic materials, such as plutonium, in PF-4. This discussion between the DNFSB and DOE has been going on for over a decade. The final Pit Production PEIS must analyze the potential impacts of the Lab not installing active confinement at PF-4.

As the Defense Nuclear Facilities Safety Board (DNFSB) noted in its required 2018 annual report to Congress:

“Nuclear Criticality Safety at Los Alamos National Laboratory (LANL)—Based on an evaluation of the LANL nuclear criticality safety program, the Board in its November 28, 2018, letter to the Secretary of Energy, identified the following related to this vitally important safety program: (1) lack of concrete milestones in corrective action initiatives for weaknesses in the program; (2) inadequate staffing in the nuclear criticality safety division; (3) inadequate documentation for daily work activities with the potential to impact nuclear criticality safety; (4) instances of poor operational quality in implementing nuclear criticality safety requirements; and (5) repetitive, ineffective corrective actions for weaknesses in the program.”⁹⁸

⁹⁵ Defense Nuclear Facilities Safety Board 29th Annual Report to Congress, April 2019, p. ii, <https://www.dnfsb.gov/sites/default/files/document/17791/2018%20Annual%20Report%20to%20Congress%200%5B2019-100-017%5D.pdf>

⁹⁶ Recommendation 2009-2, DNFSB, https://www.dnfsb.gov/sites/default/files/document/10377/rec_2009-2_32.pdf

⁹⁷ See *Los Alamos Activity Report for Week Ending April 1, 2022*, DNFSB, <https://www.dnfsb.gov/sites/default/files/document/25541/Los%20Alamos%20Week%20Ending%20April%201%202022.pdf>

⁹⁸ Defense Nuclear Facilities Safety Board 29th Annual Report to Congress, April 2019, p. ii, <https://www.dnfsb.gov/sites/default/files/document/17791/2018%20Annual%20Report%20to%20Congress%200%5B2019-100-017%5D.pdf>

We contend that the final Pit Production PEIS must analyze the occupational and public risks of repeated, chronic nuclear criticality safety incidences at LANL and how to resolve them. And any lessons learned should be applied to pit production at the Savannah River Site as well.

We excerpt the following passages from the DNFSB's March 2024 Report to Congress:

"The Board is concerned that DOE's planned and completed actions will not be sufficient to drive necessary safety improvements to the requirements and processes that ensure safe and effective management of decades-old defense nuclear facilities.

Onsite Transportation Safety—The Board identified safety weaknesses in Los Alamos National Laboratory's (LANL) transportation safety document, stemming in part from weaknesses in the safe harbors that govern transportation safety document development under 10 CFR 830, Nuclear Safety Management.

Los Alamos National Laboratory Plutonium Facility Safety Posture—NNSA is working to improve the safety basis and engineered safety systems for the LANL Plutonium Facility to support the facility's increased mission scope...The Board is using this information to evaluate the assumptions that underpin NNSA's passive confinement strategy for the facility, the functional requirements of the facility fire suppression system, and the design and performance requirements for the facility's confinement ventilation system.

In a January 19, 2024, letter, the Board noted that, while LANL has implemented several notable process upgrades that reduce the risk of radiological releases caused by adverse chemical reactions in transuranic waste, LANL still has not defined how the chemical compatibility program will interface with the nuclear safety bases of its facilities. Further, the Board noted opportunities for improvement within the chemical compatibility program.

Criticality Safety

Over the last several years, the Board has observed persistent criticality safety staffing challenges and increased significance of criticality safety infractions."⁹⁹

In response to "Criticality Safety," the draft LANL SWEIS stated:

"... In response to the DNFSB, DOE took actions to address the criticality safety concerns. Corrective actions include revising the Nuclear Criticality Safety Program. In addition, the Laboratory conducted a causal analysis of criticality safety infractions that occurred in 2013 and submitted a plan to DOE for reopening PF-4 for operations. The Laboratory incorporated corrective actions from prior assessments into the 2014 Nuclear Criticality Safety Program Upgrades Project Management Plan (LANL 2014a). Full operations, including pit manufacturing, resumed at PF-4 in August 2016. In NNSA's January 2023 annual report to the DNFSB (NNSA 2023c) regarding DOE nuclear criticality safety programs, LANL's "program health" and "operational implementation" were both assessed to be "good." In a letter in August 2023, DNFSB acknowledged that the Laboratory completed a probabilistic risk analysis and concluded that the seismic safety risk of PF-4 is acceptable until the site-specific probabilistic seismic

⁹⁹ *Defense Nuclear Facilities Safety Board 34th Annual Report to Congress*, https://www.dnfsb.gov/sites/default/files/document/30216/DNFSB%2034th%20Annual%20Report%20to%20Congress_0.pdf

hazard analysis is updated in 2025. DNFSB found that NNSA's conclusion was technically defensible and that the accompanying peer review process was robust (DNFSB 2023). (Volume 2, PDF page 44 & 45)

Note that DNFSB "concluded that the seismic safety risk of PF-4 is acceptable until the site-specific probabilistic seismic hazard analysis is updated in 2025." DNFSB has reported that the new LANL PSHA has been completed. However, despite multiple requests LANL has not released it for citizen analysis during this Pit Production PEIS comment period. We contend that is yet another violation of the National Environmental Policy Act.

The "increased significance of criticality safety infractions" is concerning. Their frequency and significance may well (or is even likely to) increase as LANL tries to speed up expanded plutonium pit production. We are also concerned with "persistent criticality safety staffing challenges" that we address more in our comment section Essential vs Non-Essential DOE Personnel.

As previously stated, the Defense Nuclear Facilities Safety Board has been indispensable in reporting nuclear safety incidences across the nuclear weapons complex. Now the very survival of the Safety Board is imperiled. In October 2025 one of the two remaining Board Members terms out, leaving the Safety Board without a functioning quorum unless a new member is nominated and confirmed. That is growing increasingly unlikely. The PEIS first needs to thoroughly analyze how LANL's chronic track record of nuclear safety incidences can be fully resolved. Secondly, it needs to analyze how needed improvements in the future would be discouraged and/or prevented in the event that the Defense Nuclear Facilities Safety Board ceases to function.

Further, in its own interests and for its own good, NNSA should encourage nominations and confirmations to the Board. After all, it would take only one major accident in NNSA's nuclear weapons complex to radically change political and popular support for it. The Safety Board is important insurance that could help prevent a major accident.

Safety Board Access to NNSA Sites

Nuclear Watch New Mexico played an important role in beating back NNSA's previous attempt to restrict Defense Nuclear Facilities Safety Board access to its nuclear facilities. That was the infamous 2018 DOE Order 140.1 Interface with the Defense Nuclear Facilities Safety Board. DOE and NNSA had to back down in the face of strong congressional and public opposition.

DOE and NNSA are unrelenting and are apparently at it again, but even worse. As the Board very recently formally reported to Congress:

"The Board's enabling legislation requires the Secretary to fully cooperate in providing prompt and unfettered access to facilities, personnel, and information as the Board considers necessary to carry out its oversight responsibilities in support of the safe execution of DOE's vital national security and radioactive waste cleanup missions. For most of the past three decades, DOE and its contractors have provided full cooperation. In the rare instances where access requests were not fulfilled, the matter was elevated such that the Board worked directly

with the Secretary towards resolution. In 2021, following a period of significant access challenges [i.e., Order 140.1], Congress directed the Board and DOE to develop a Memorandum of Understanding (and Supplementary Agreement) to memorialize how the two agencies would work together to ensure the Board had the necessary access to fulfill its oversight mission. Many of the access challenges the Board is currently experiencing are inconsistent with the approved Memorandum of Understanding. The Board is concerned that **this significant level of access denial and limitation is occurring simultaneously with a considerable increase in production at defense nuclear facilities and regulatory change.**"¹⁰⁰

Nuclear Watch New Mexico does not consider it coincidental that “this significant level of access denial and limitation is occurring simultaneously with a considerable increase in production at defense nuclear facilities and regulatory change.” We suspect that is intentional and by conscious design. NNSA uses the word "**safety**" in the draft Pit Production PEIS. But rhetoric and reality are two things. Concerning seismic safety, both the draft PEIS and LANL SWEIS referred to an updated Probabilistic Seismic Hazard Analysis (PSHA) for LANL, yet the actual study has not been publicly released in time for the comment period. Concerning **Operational Safety**, the PEIS models clean, accident-free multi-site operations, omitting PF-4's historical safety pauses, criticality safety infractions, and past waste-handling accidents. Concerning radioactive waste safety, the draft document treats the transport and disposal of transuranic waste as routine, despite ongoing concerns over WIPP's capacity and past drum failures that closed the facility for just short of three years, costing taxpayers billions to reopen.

While NNSA uses the word “safety” hundreds of times in the draft Pit Production PEIS to satisfy NEPA requirements, the actual execution of the 80+ pit-per-year requirement will compromise safety throughout the nuclear weapons complex. In our view, the single best way that NNSA could promote safety is to grant the Defense Nuclear Facilities Safety Board unfettered access to nuclear facilities when and where the Safety Board chooses, as its enabling legislation already mandates. Because it is restricting access (which DNFSB personnel tell us is the worst they have ever seen) despite the Safety Board’s clear unambiguous legislation, NNSA is arguably acting in an illegal manner.

¹⁰⁰ *July 2026 Report to Congress re Access Denial*, DNFSB, July 10, 2026, July 10, 2026, <https://www.dnfsb.gov/sites/default/files/2026-07/July%202026%20Report%20to%20Congress%20on%20Denials%20%5B2026-100-032%5D.pdf>

According to DNFSB, highlights include:

- **Explicitly Denied Access Requests** – Documents and meetings for which the Department explicitly denied the Board access during the reporting period, along with the associated safety rationale and current status.
- **Constructive Denials** – Requests that remain significantly overdue or unanswered, including overdue reporting requirements and implementation deliverables related to Board recommendations.
- **Impact on Oversight** – An overview of how delayed or denied access affects the Board’s ability to independently evaluate safety conditions and conduct oversight activities.
- **Status of Outstanding Requests** – A summary of previously requested information, including implementation plans, technical reports, safety analyses, and other materials that remain pending.

Therefore, the final Pit Production PEIS should analyze how to improve safety across the plutonium pit production program by fully cooperating with the DNFSB, rather than constantly trying to restrict its access.

Human Health Issues

The PEIS quantitatively evaluates radiological doses, latent-cancer-fatality risk, worker exposure, accidents and radioactive-material transportation. It concludes that incremental offsite doses from LANL pit production would be less than one percent of existing reported public dose and that the additional public-health risk from normal operations is small (Volume 1, PDF page 213). At SRS, it likewise calculates regional population dose and maximally exposed individual dose, finding the pit-production increment small in relation to existing DOE activities and other baseline sources (Volume 2, PDF page 223 & 224).

The draft PEIS does not address reproductive harms associated with environmental contamination include miscarriage, birth defects, infertility, and hormone disruption. Studies of nuclear-exposed populations demonstrate that exposure to radiation can have persistent effects on fertility, fetal development, and epigenetic expression. Women and gender-expansive people often serve as the primary caregivers in land-based communities. When exposure to radiological contamination results in cancers, respiratory illness or reproductive health issues, it is often women who carry the responsibility of navigating care, mourning losses, and holding families together.

In terms of worker safety, increased plutonium pit production will generate more low-level, mixed low-level, hazardous, and transuranic waste that new waste facilities will be constructed. How much more radiation will lab workers be exposed to if they are assigned to this new waste facility? The draft PEIS does not analyze an increased need for comprehensive health care plans for pit production workers. The draft PEIS's regulatory-dose framework does not fully address the lived and historical basis of community concern.

The draft PEIS health analysis generally evaluates a maximally exposed individual and the collective population within 50 miles. These are inadequate radiological-risk methods. The final PEIS should expand the accident impact radius beyond 50 miles to account for worst-case scenarios such as facility fires. Additionally, the NNSA must account for the cumulative impacts of other chemicals in the environment. The final PEIS should include analysis for vulnerable populations such as children, women, low-income, Indigenous, and rural communities not represented in traditional exposure limits.

Transportation Issues

The analysis of material and waste transportation in the draft PEIS presumes a complex transportation network in which retired pits and other plutonium material are shipped primarily from Pantex to LANL or SRS. The draft PEIS outlines aggregate shipment estimates, regulatory compliance, and accident-risk modeling, but deliberately avoids identifying transportation routes, citing security considerations, and instead evaluates impacts generically along transportation corridors between NNSA sites. The draft PEIS concludes that transportation risks remain low

because of certified shipping containers, trained personnel, and the historical safety record of NNSA's secure transport system. This conclusion is drawn based on looking at shipments largely as independent events rather than examining how dramatically expanded pit production would increase cumulative shipment frequency over decades/centuries/millennia (the half-life of plutonium is 24,100 years). Increased production necessarily implies more movements of plutonium, highly enriched uranium, radioactive waste, and supporting materials. However, despite being an analysis for a period of 50 years, the draft PEIS does not adequately address long-term implications of sustained material and waste transportation demand.

The draft PEIS also lacks adequate analysis of emergency preparedness outside DOE facilities, and of the capabilities of local emergency responders, state agencies, Tribal governments, or rural communities that could encounter an accident involving radiological materials. The draft PEIS does not at all evaluate how repeated shipments could affect infrastructure wear or cumulative transportation burdens in communities along frequently used corridors.

The draft PEIS lacks publicly available routing information. While the exact routes are classified for security reasons, the PEIS could have presented and analyzed updated publicly known transportation corridors, state highway systems, interstate routes, and generalized shipment patterns without compromising national security. Previous litigation, state emergency planning documents, and historical DOE transportation studies have identified likely corridors connecting Pantex, LANL, SRS, Y-12, and WIPP. The final PEIS must synthesize that unclassified information and evaluate which routes and regions would experience the greatest concentration of shipments over the program's lifetime.

Environmental Justice Issues

The PEIS addresses several subjects that are relevant to environmental justice (Tribal consultation, demographics, poverty, housing, public health, radioactive waste, transportation and cumulative impacts) but it does not specifically conduct an environmental justice analysis. There is no dedicated environmental justice section, no identification of potentially overburdened communities, no comparison of burdens among population groups and no determination of whether adverse effects would be disproportionately borne by Indigenous, low-income, Black, Hispanic or rural communities.

The "No-Action Alternative" in the PEIS precludes the pit production rate as effectively non-negotiable at no less than 80 pits per year. The lack of a true No-Action/ Reduced Operations Alternative makes this environmental review an exercise in managing the impacts of a predetermined weapons-production program rather than a true assessment of whether expanded pit production perpetuates a historically unjust system of sacrifice zones, radioactive waste transport and intergenerational risk. The environmental justice analysis in the draft PEIS, or lack thereof, falls far below what would be expected of a genuinely community-centered assessment.

The agency's response to scoping comment "NNSA has not adequately consulted affected Tribes under Section 106 of the National Historic Preservation Act. They request formal government-to-government consultation and greater inclusion of tribal perspectives in the environmental review process," was:

“NNSA recognizes its government-to-government responsibilities and is committed to ongoing consultation with federally recognized tribes, consistent with Section 106 of the National Historic Preservation Act, DOE Order 144.1A, DOE NEPA Implementing Procedures, and Executive Order 13175. Consultation with affected tribes and pueblos has been initiated and continues throughout the NEPA process to identify and address potential impacts to cultural and historic resources and to incorporate tribal input.”¹⁰¹

The draft PEIS documents online public meetings and a Tribal-only meeting attended by representatives from 12 Tribes or Pueblos that happened during the scoping process. These measures constitute consultation, but do not necessarily guarantee Tribal participation. Consultation should mean communities are given an opportunity to participate and interact. But how did input and community knowledge from these consultations change the scope, alternatives, assumptions, mitigation or final decision? It apparently did not inform any of those, according to the draft PEIS.

The draft PEIS recognizes severe geographic inequality around the pit production sites, LANL and SRS, but does not use that information to evaluate and illustrate the disproportionate effects. Los Alamos County has a median household income more than twice the New Mexico average, while Rio Arriba County has the region’s lowest income and highest poverty rate (Volume 1 PDF pages 76-79). Near SRS, income and poverty levels also vary significantly: Columbia County is relatively affluent, while Barnwell County has the lowest income and highest poverty rate in the four-county region. LANL and SRS regions will experience a net economic benefit even while housing, traffic, water and energy costs and exposure risk fall disproportionately on communities receiving few of the high-paying jobs. This is a clear environmental justice issue that is not addressed as such in the draft PEIS.

Furthermore, the compartmentalization of the two sites in the draft PEIS, as well as the division of sections of human health, socioeconomic, cultural resources, transportation, water and waste into separate technical sections, make it so that the environmental justice implications of the overall program remain difficult to see and to understand the cumulative impact of these aspects of the pit production program. The draft PEIS provides demographic information but does not classify any community as potentially overburdened or disproportionately affected. It does not compare risks to Pueblo communities, for example Española and Rio Arriba County, to the much wealthier population of Los Alamos County.

The draft LANL SWEIS stated:

Under EO [Executive Order] 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” 37 federal agencies are responsible for identifying and addressing the possibility of disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations (59 FR 7629, February 16, 1994)...

Regardless of alternatives considered in this SWEIS, DOE will continue to implement its environmental justice requirements and obligations in accordance with DOE’s trust responsibilities to

¹⁰¹ Draft Pit Production PEIS, Volume 2, Appendix B – Scoping Process and Summary B-9.

tribal nations, EOs on environmental justice; [and] guidance from the CEQ [Council on Environmental Quality]...

- Protecting tribal people and their resources—land, air, water, vegetation, wildlife and fisheries—from DOE actions that could harm their health, safety, or sustainability.
- Protecting “reserved” rights (such as hunting and fishing rights that were specified in treaties as retained or reserved even though the lands are not part of the reservation).
- Protecting Indian cultural and religious artifacts and sites on land now managed by DOE, and avoiding any unnecessary interference with traditional religious practices, which includes providing appropriate access to sacred sites on DOE lands.
- Protecting the sovereignty of tribal governments.

... LANL shares a property boundary with the Pueblo de San Ildefonso—one of several sovereign federally recognized tribes with a government-to-government relationship with DOE. Other federally recognized tribes within the ROI [LANL’s “Region of Influence”] include portions or entireties of the Pueblos of Cochiti, Jemez, Nambé, Ohkay Owingeh, Picuris, Pojoaque, Sandia, Santa Ana, Santa Clara, San Felipe, Santo Domingo, Taos, Tesuque, Zia, and a portion of the Jicarilla Apache Indian Reservation. (Volume 1, PDF pages 241-242)

In his second day in office, Trump wasted no time in revoking Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” under the rubric of “Ending Illegal Discrimination and Restoring Merit-Based Opportunity.”

Environmental justice language is completely absent in the draft Pit Production PEIS. Therefore, how will DOE “continue to implement its environmental justice requirements and obligations in accordance with DOE’s trust responsibilities to tribal nations”? How will DOE and NNSA communicate this to the affected Tribes? More seriously, what are the substantive impacts to the Tribes of any deletion, in whole or part, of environmental justice issues? And how will this impact DOE/NNSA relations with the Tribes? The PEIS does not answer central environmental justice questions of who receives the economic benefits, who bears the health and environmental risks, and how does that connect and interact with existing disproportionate risk and historical contamination? Will there be legal ramifications regarding the absence of environmental justice issues in the final Pit Production PEIS?

DOE and NNSA must uphold their federal trust responsibility in conducting meaningful tribal consultation on the draft PEIS. Consultation should never put the burdens of travel, education, and technical support onto tribal communities. The Final PEIS should add a distinct environmental justice chapter or integrated environmental justice assessment that documents how Tribal and community input changed the analysis; identifies specific affected communities using Tribal and community-supplied information; evaluates unequal access to jobs and exposure to housing and infrastructure burdens; commits to community health monitoring and independent environmental sampling; and explains how this expanded pit production program would produce disproportionate burdens, and why NNSA nevertheless considers that burden acceptable.

Seismic Issues

NNSA must have current seismic studies at all relevant sites incorporated into the Pit Production PEIS, especially the Los Alamos and Lawrence Livermore National Laboratories.

An October 2024 report analyzing the Pajarito Fault System under Los Alamos states:

“The subsurface geology beneath the Pajarito Plateau is critical to understanding the seismic hazard of the Pajarito Fault System, yet our understanding of this geology is relatively poor. While previous 3D geologic framework models of the area have been created for the purposes of understanding hydrogeologic flow, they are inadequate for the purposes of understanding the Pajarito Fault System.”¹⁰²

DOE requires a site-specific Probabilistic Seismic Hazard Analysis (PSHA) for the design of certain seismic design category facilities. In 2007, a comprehensive update to the 1995 seismic hazard analysis of LANL was completed and incorporated into the 2008 SWEIS analysis. The comprehensive 2007 update indicated that the seismic hazard was higher than previously understood from the initial 1995 PSHA. The 2007 seismic hazard study was updated in 2009 to incorporate a new set of ground motion attenuation relationships and to examine potential conservatism in the 2007 study.

The PSHA process uses information available to the US Geologic Survey, but also incorporates more detailed, site-specific geologic, geophysical, and geotechnical information to determine seismic hazard curves. Site-specific seismic hazard analysis at LANL estimated horizontal and vertical PGAs. Until an updated LANL sitewide PSHA is completed, seismic safety designs are based on information from the 2007 LANL PSHA and subsequent 2009 update. All of this is directly related and relevant to expanded plutonium pit production since it prompted serious seismic upgrades to PF-4 which are still yet to be fully completed.

The public did not get a chance to comment on the implications of an updated PSHA for the LANL SWEIS, which is a serious deficiency. NNSA should make LANL stop its foot dragging and get the final PSHA completed. Comprehensively updated PSHAs for both the Los Alamos and Livermore Labs must be incorporated into the Pit Production PEIS for that document to have credible risk analyses.

Concerning the PSHA’s relevance to the Pit Production PEIS, DOE Order 420.1C (Facility Safety) requires that all Management and Operating contractors review and, if necessary, update the site-specific seismic hazard assessments at least every 10 years. LANL and NNSA are already grossly negligent in that the last PSHA was completed in 2007. This has potentially serious impacts because federal regulations require that if a new or updated PSHA demonstrates that the seismic hazard has increased beyond the existing facility design basis, LANL must trigger the Unreviewed Safety Question process. See 10 C.F.R. §§ 830.203, 830.204. This

¹⁰² 3D Geologic Framework Modelling of the Los Alamos National Laboratory Site and Pajarito Plateau: Integrating a realistic 3D fault network and modelling subsurface relationships in a sparsely sampled and complex geologic region, LA-UR-24-31214, 2024-10-16, <https://www.osti.gov/search/semantic:LA-UR-24-31214>

requires an evaluation of whether the existing Documented Safety Analysis (DSA) remains bounding and whether further mitigation measures are necessary.

Instead of having the new, way overdue Probabilistic Seismic Hazard Analysis available for informed public comment in NNSA's January 2025 draft LANL Site-Wide Environmental Impact Statement (SWEIS), the agency stated:

DOE requires a site-specific Probabilistic Seismic Hazard Analysis (PSHA) for the design of SDC 3–5 facilities as defined in DOE-STD-1020-2016. In 2007, a comprehensive update to the 1995 seismic hazard analysis of LANL was completed and incorporated in the 2008 SWEIS analysis. The 2007 comprehensive update indicated that the seismic hazard was higher than previously understood from the initial 1995 PSHA. The 2007 seismic hazard study was updated in 2009 to incorporate a new set of ground motion attenuation relationships and to examine potential conservatism in the 2007 study (LANL 2009). **LANL is currently engaged in an update to the 2007 PSHA, which is scheduled for completion in 2025.**¹⁰³

Then NNSA's March 2026 final LANL Site-Wide Environmental Impact Statement (SWEIS) sloppily repeated after the fact, "LANL is currently engaged in an update to the 2007 PSHA, which is scheduled for completion in 2025."¹⁰⁴

The new updated PSHA should have been incorporated into both the more recent draft and final LANL Site-Wide Environmental Impact Statements, as NNSA has stated that it correctly did for the 2008 LANL SWEIS. Why did it not do so for the 2026 final LANL SWEIS whose Record of Decision stated:

"NNSA has concluded that the Expanded Operations Alternative would best fulfill its statutory missions and responsibilities. Therefore, NNSA has decided to fully implement the Expanded Operations Alternative... The LANL SWEIS provides information on the potential environmental impacts and options for satisfying the purpose and need for the agency's action. NNSA prepares cost, schedule, and technical analyses separately, and **NNSA has considered all relevant factors in the preparation of this ROD.**"¹⁰⁵

While selecting the most extreme of its three alternatives for expanded nuclear weapons programs, contrary to what it says, NNSA clearly did not consider all relevant factors, such as a new long overdue Probabilistic Seismic Hazard Analysis.

This negligent NEPA behavior continues unabated right into this draft Pit Production PEIS whose public comment period is ending now. The April 2026 draft PEIS repeated the claim that

¹⁰³ Draft LANL Site-Wide Environmental Impact Statement, NNSA, January 2025, p. 4-24, bolded emphasis added.

¹⁰⁴ Final LANL Site-Wide Environmental Impact Statement, NNSA, March 2026, p. 4-13.

¹⁰⁵ *Record of Decision for the Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory*, NNSA and DOE-EM, March 17, 2026,

“DOE/NNSA is updating the site-specific probabilistic seismic hazard analysis, which is expected to be released in early 2026.”¹⁰⁶

The Defense Nuclear Facilities Safety Board has confirmed that it has been concluded and approved for several months.¹⁰⁷ As previously stated, on July 6, 2026, the South Carolina Environmental Law Project representing Nuclear Watch New Mexico demanded the immediate release of the new PSHA so that it could be available to inform citizen comment before the expiration of the public comment period. On June 30, an interested citizen asked the NNSA Los Alamos Field Office for the new PSHA. He was told to file a FOIA request, which typically takes 300+ days to be fulfilled, in other words long after the comment period expires. On July 9 Nuclear Watch New Mexico demanded that NNSA Los Alamos Field Office release the new PSHA before the comment period expired.

Assessing seismic hazards and attendant risks at a pit production site with the most recent information is necessary for the hard look at potential environmental consequences under NEPA that the PEIS is supposed to afford. NEPA also mandates that the public have access to this recent information to inform meaningful comments prior to the expiration of the draft PEIS public comment period. None of these requests and demands have been fulfilled which we believe is in further violation of the National Environmental Policy Act.

Consequence Analysis of Major Fires at Plutonium Pit Production Facilities

A major study has been recently released that indicates that NNSA’s risk assessments for expanded plutonium pit production are way too low.

Abstract

As the United States reestablishes large-scale plutonium pit production, federal agencies have published environmental impact studies estimating radiological consequences from major facility fires in New Mexico and South Carolina. These analyses predict average latent cancer fatalities in the single digits but do not evaluate total cancers or remediation costs from land contamination. Using atmospheric transport and dispersion modeling, this study independently estimates downwind plutonium deposition and inhalation, cancer risk, and land contamination across meteorological conditions for different source terms. For assumptions consistent with current federal analyses, a 1-kilogram respirable release could produce up to 21 latent cancer fatalities, with total cancers three times higher. Tens of square kilometers of land could require billions of dollars in soil remediation, while contamination in residential areas could require evacuation.

¹⁰⁶ Draft Pit Production PEIS, NNSA, April 2026, p. 2-13, <https://www.energy.gov/nepa/articles/doeeis-0573-draft-environmental-impact-statement-april-2026>

¹⁰⁷ Los Alamos National Laboratory Resident Inspectors Activity Report for Week Ending May 22, 2026, DNFSB, <https://www.dnfsb.gov/sites/default/files/2026-06/Los%20Alamos%20Week%20Ending%20May%2022%202026.pdf>. Of note concerning its on-the-ground relevance to NNSA implementing its Expanded Operations Alternative at LANL: “Ground motion is an important input for evaluating facility and equipment response to design-basis seismic events. The contractor plans to incorporate the results of the new PSHA into site engineering and safety-basis documents.”

Larger releases involving different fire conditions and smaller particle sizes could cause over 1,000 fatalities, suggesting current assessments may underestimate accident consequences.

Conclusion

This study presents a consequence analysis of potential major fires at plutonium pit production facilities at Los Alamos National Laboratory and the Savannah River Site. Using atmospheric transport simulations, it evaluates long term cancers and cancer fatalities, land contamination, and the spatial distribution of affected populations across a range of particle sizes and meteorological conditions. For 5-micron particles, average cancer fatality estimates are consistent with those reported in DOE environmental impact statements, but a wide distribution of outcomes emerge due to weather variability. The analysis indicates that substantial areas of land could exceed established contamination thresholds, with potential remediation costs exceeding those of the Rocky Flats cleanup. Historical evidence from the 1957 Rocky Flats fire suggests that respirable releases may be larger than currently assumed. Accounting for smaller particles and a broader range of fire conditions, estimated latent cancer fatalities could be up to two orders of magnitude higher than current federal evaluations. These findings suggest that existing assessments may underestimate the consequences of major plutonium fires and warrant further analysis.¹⁰⁸

As the study indicates:

“Environmental impact statements for Los Alamos (2008) and the Savannah River Site (2020) conclude that major fires resulting in complete loss of containment would lead to only a small number of latent cancer fatalities from inhalation of plutonium oxide particles on average. They do not, however, include projection of total cancers or analysis of land contamination and associated remediation costs...”

“The results of this study independently reproduce the average latent cancer fatality estimates reported in environmental impact statements. However, simulating hourly meteorological conditions over one year reveals that weather driven variability alone produces a wide distribution of outcomes, including scenarios with fatalities three to ten times higher than reported averages. Extending the analysis to include a broader particle size distribution, a wider range of cancer risk coefficients, and larger source terms informed by the 1957 Rocky Flats fire further increases estimated impacts, fatalities could potentially reach orders of magnitude above current bounding values. Major fires could also contaminate hundreds of square kilometers of land, including tens of square kilometers where remediation would be required at substantial cost. In extreme cases, contamination may be too severe or widespread for remediation to be feasible.”

As factors that the study lists contributing to its much higher estimates of latent cancer fatalities are:

“...this work examines the effect of particle size on deposition and cancer fatalities... The initial 5-micron analysis [used by NNSA] is extended by simulating the same 1 kg source term using a

¹⁰⁸ *Consequence Analysis of Major Fires at Plutonium Pit Production Facilities*, Raven Witherspoon, Svitlana Lavrenciuc & Sébastien Philippe, Published online: 10 Jul 2026, Science & Global Security: The Technical Basis for Arms Control, Disarmament, and Nonproliferation Initiatives, Princeton University, <https://www.tandfonline.com/doi/full/10.1080/08929882.2026.2690796>

lognormal distribution of particles sizes with activity median aerodynamic diameter (AMAD) of 0.88 micron (~1-micron) and a geometric standard deviation of 0.39.

“Simulations using this particle size distribution result in substantially higher latent cancer fatalities than the 5-micron case. At the Savannah River Site, average fatalities increase from 3 to 40, and the highest consequence simulation produces roughly 330 fatalities. At Los Alamos, average fatalities increase from 2 to 10, and the maximum fatality run approaches 210 fatalities, a tenfold increase over the 20-fatality maximum produced with 5-micron AED particles.

“A reevaluation of the 1957 Rocky Flats fire, completed in 1999 for the Colorado Department of Health, indicates that the fraction of plutonium released in respirable form may be larger than the values used in DOE environmental impact statements. That reconstruction identified a broader range of airborne release fractions and respirable fractions, two parameters that strongly effect the size of the respirable source term, from the literature. Under moderate conditions, latent cancer fatalities could be twice as large as those identified in environmental impact states. In the most extreme scenarios, fatalities could increase by a factor of four or five.”

On potential costs of remediation, the study notes:

The environmental impact statements for pit production at Los Alamos and the Savannah River Site do not include estimates of land contamination or remediation costs... For Los Alamos, the simulation with the largest area exceeding the Rocky Flats cleanup threshold of 50 pCi/g, equivalent to 18,500 Bq/m², would require soil remediation over 50 square kilometers, corresponding to an estimated cost of 150 billion dollars. Across all Los Alamos simulations, an average of 8 square kilometers would exceed the threshold, at a cost of about 24 billion dollars. For the Savannah River Site, the maximum contaminated area above the same threshold is 60 square kilometers, with an estimated cost of 180 billion dollars, and the average contaminated area is 9 square kilometers, with an associated cost of about 27 billion dollars.

Nuclear Watch New Mexico doesn't have the technical expertise to judge whether the findings of Consequence Analysis of Major Fires at Plutonium Pit Production Facilities are right or wrong, although the study certainly appears well sourced, well-reasoned and amply documented. But what is clear to us is that NNSA's calculations in NEPA documents for potential doses and latent cancer fatalities are always ridiculously low. In the event of a “Facility-wide seismic event and fire in PF-4” the calculated probability for the “Offsite Population” (defined as the ~420,000 people living within the 50-mile radius of LANL) of a latent cancer fatality is 4.1×10^{-6} ,¹⁰⁹ or roughly a 1 in 244,000 chance that an individual would develop a fatal cancer.

This clearly does not square with Consequence Analysis of Major Fires at Plutonium Pit Production Facilities. Nor does it square with past Defense Nuclear Facilities Safety Board analyses that have calculated lethal occupational and quite harmful public doses.¹¹⁰ The final Pit Production PEIS must take into account all relevant factors, for example variable meteorological

¹⁰⁹ Draft Pit Production PEIS, NNSA, April 2026, p. S-28.

¹¹⁰ See for example, Potential Energetic Chemical Reaction Events Involving Transuranic Waste at Los Alamos National Laboratory, Defense Nuclear Facilities Safety Board Technical Report September 2020, <https://www.dnfsb.gov/sites/default/files/document/22156/Tech-46%2C%20Potential%20Energetic%20Chemical%20Reaction%20Events%20Involving%20Transuranic%20Waste%20at%20LANL%20%5B2020-100-055%5D.pdf>

conditions, particle sizes and historic data from past fires, and honestly assess potential doses and latent cancer fatalities.

This alternative study leads to a host of questions that the final Pit Production PEIS must answer:

How will the final PEIS assess the likelihood and consequences of major plutonium fires, including fires involving pyrophoric plutonium and loss of containment?

Why does the draft PEIS not evaluate land contamination resulting from a major facility plutonium fire with loss of containment? Please address this in the PEIS.

Does DOE estimate the total number of radiation-induced cancers resulting from major accident scenarios, in addition to latent cancer fatalities? If not, why was this analysis omitted? Please address this in the PEIS.

Please estimate the minimum, average, and maximum downwind areas requiring remediation following a major fire with loss of containment. Please also identify the conditions under which residential areas would require evacuation or relocation.

When so much depends meteorologically, why does the draft PEIS limit its consequence analysis to a 50-mile radius? Please quantify the health and environmental impacts occurring beyond this boundary and explain why they were excluded from the analysis.

Does the draft PEIS evaluate the effects of different plutonium particle size distributions on atmospheric transport, deposition, and public health consequences? If not, why not?

Why does the draft PEIS not estimate remediation costs associated with land contamination following a major plutonium fire?

Risk analysis lies at the heart of the National Environmental Policy Act. NEPA requires federal agencies to take a "hard look" at the potential environmental and human health consequences of their proposed actions before making decisions. Risk analysis should be the analytical engine that makes this "hard look" possible, turning proposed federal actions into quantifiable, science-based evaluations of their possible harmful impact to humans and the environment. NNSA's cookie-cutter approach that always arrive at self-serving low dose and latent cancer fatalities calculations is reprehensible and should end.

Exhibit B: Title page of Consequence Analysis of Major Fires at Plutonium Pit Production Facilities, entered for the record. We incorporate the full analysis by reference.

NNSA Must Prepare a New Site-Wide Environmental Impact Statement for the Pantex Plant

We warned NNSA beginning in October 2018 that it must complete a Pit Production PEIS. Here, in these PEIS comments, we are warning NNSA that in addition to the fact that pit reuse and Pantex's Pit Requalification Facility must be extensively discussed and analyzed as a required

programmatic element, that the agency needs to complete a new Site-Wide Environmental Impact Statement (SWEIS) for its Pantex Plant.

In January 1997, DOE published a Record of Decision in the Federal Register (62 FR 3880), announcing its decision to implement the Preferred Alternative evaluated in the Pantex Site-Wide Environmental Impact Statement (SWEIS) by:

“(1) continuing nuclear weapon operations involving assembly and disassembly of nuclear weapons at the Pantex Plant; (2) implementing facility projects, including upgrades and construction consistent with conducting these operations; and (3) continuing to provide interim pit storage at the Pantex Plant and increasing the storage level from 12,000 to 20,000 pits.” (DOE/EIS-0225; DOE 1996a)

Outside of the Pit Production PEIS, the possible impacts of pit reuse must be analyzed in a new Pantex SWEIS. If pit reuse is not analyzed, then permanent disposal of the up to 20,000 pits at Pantex must be analyzed. Pit storage can no longer be considered “interim.”

Four Supplement Analyses (SAs) for the Pantex SWEIS have been completed since the issuance of the 1997 ROD: (1) 2003 SA, approved on March 10, 2003; (2) 2008 SA, approved on January 14, 2009; (3) 2013 SA, approved on January 28, 2013; and (4) 2018 SA, approved on July 18, 2018. The analyses in these four SAs indicated that the identified and projected impacts for all areas were not substantially changed from those identified in the 1996 SWEIS, nor did they represent significant, new circumstances or information relative to environmental concerns. So, NNSA issued determinations that there was no need to supplement the SWEIS or to prepare a new SWEIS for the Pantex Plant. DOE claims that the fourth five-year update of the 1996 SWEIS, fulfills DOE/NNSA’s requirement to review the SWEIS at least every five years as required by 10 CFR §1021.330(d).

The 1996 SWEIS assessed impacts on areas of the human and natural environment potentially affected by operations performed at Pantex. The Pantex SWEIS evaluated activities associated with ongoing operations, including onsite nuclear material storage, transportation of nuclear material to an alternate site for interim storage, and transportation of classified components between the Pantex Plant and other sites occurring over a period of approximately 10 years, from 1996 through 2006. The analysis assumed that production (the combined activities of assembly, disassembly, and modifications) would not exceed 2,000 weapons per year and assessed the impacts of activity levels required to produce 2,000, 1,000, and 500 weapons per year.

DOE must analyze if the combined activities of assembly, disassembly, and modifications including expanded pit production will exceed the 2,000 weapons per year limit.

It’s been nearly 30 years since the last full-on Pantex SWEIS. Since that time, in addition to radically increased nuclear weapons assembly and decreased dismantlement missions, there was a “1,000 year” flood in 2011 and a wildfire in 2023 that forced a temporary evacuation of the Plant. It’s been way too long to continue relying upon a 30-year old SWEIS when clearly there is new information and substantially changed circumstances.

All Reference Documents Must Be Readily Available

All unclassified reference documents in the Pit Production PEIS, and, for that matter, all NNSA NEPA processes, should be readily online for the public, with classified supporting documents (if any) noted as such. We have been saying this directly to NNSA since the 2008 LANL Site-Wide Environmental Impact Statement (SWEIS) process. It is way past time for the agency to correct this.

This strongly applies as well to key documents that NNSA is withholding, such as the new JASON pit life study, DOE's "Special Study" on its troubled plutonium pit production program, and LANL's new Probabilistic Seismic Hazard Analysis.

- End of Comments -

Sincerely,

Jay Coghlan, Executive Director
Scott Kovac, Research Director,
Sophia Stroud, Communications Director

These comments are also available online at <https://nukewatch.org/nwnm-pit-peis-comments-7-16-26/>

Exhibit A
South Carolina Environmental Law Project July 6, 2026
Letter of Demand



**SOUTH CAROLINA
ENVIRONMENTAL
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Our Mission We use our legal expertise to protect land, water and communities across South Carolina.

July 6, 2026

VIA US MAIL

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Board Member Emeriti - Emma Chase, Peter Schmitt

Dear Secretary Wright, Administrator Williams, Ms. Dors and Ms. Fortiner:

I am writing on behalf on of my clients Savannah River Site Watch, Tri-Valley Communities Against a Radioactive Environment, and Nuclear Watch New Mexico. You may be aware of our lawsuit under the National Environmental Policy Act (NEPA) that resulted in the National Nuclear Security Administration (NNSA) undertaking the Plutonium Pit Production Programmatic Environmental Impact Statement DOE/EIS-0573 (PEIS). NNSA has released a draft PEIS for which the public comment period expires on July 16, 2026.

Given the impending expiration of the comment period, we believe that NNSA has failed to address scientific and programmatic information and analyses in its possession that are directly relevant to certain issues the PEIS purports to evaluate. It is also believed that NNSA has withheld certain crucial scientific and programmatic information from the public which would inform comments. Specifically, the documents and information in question include the following

- 1) The new JASON plutonium pit life study, entitled “Plutonium Aging: Executive Summary (Unclassified)”, document # JSR-25-03ESU.¹ Upon current knowledge, information and belief, NNSA has had possession, custody or control of that document since the end of 2025.
- 2) The United States Department of Energy’s (DOE) “special study” on NNSA leadership and management of its plutonium pit production program that was to be completed by mid-December 2025.²
- 3) The Los Alamos National Laboratory’s (LANL’s) new Probabilistic Seismic Hazard Analysis which was completed at least earlier this year if not earlier.

I. The JASON Pit Life Study

The first source of information in question is the new JASON plutonium pit life study with a relevant portion believed to be entitled “Plutonium Aging: Executive Summary (Unclassified)”, document # JSR-25-03ESU. We have reason to believe that NNSA has had possession of this document since the end of 2025.

NNSA has a long history of offering concerns regarding potential plutonium pit aging as a fundamental rationale for increasing plutonium pit production. The draft PEIS invokes the issue

¹ The title and document number are provided for ease of reference upon current knowledge, information and belief. It is understood that the actual document encompasses more than the purportedly unclassified executive summary. The essential point is there is a plutonium pit aging study authored by JASON within the past year to two years that contains information relevant to the plutonium pit aging topic.

² “Special Study of the National Nuclear Security Administration’s (NNSA’s) Leadership and Management of the Plutonium Pit Mission,” ordered by DOE Deputy Secretary James Danly on August 11, 2025, <https://nukewatch.org/wp-content/uploads/2026/01/DOE-Special-Study-NNSA-Leadership-Mgmt-Plutonium-Pit-Production-Mission-Ltr-11Aug2025.pdf>

as a justification and employs it to discount a potential alternative as well. In particular, the draft PEIS provides as follows:

- “NNSA’s existing pit manufacturing capability is insufficient to meet current production requirements, necessitating the establishment of additional pit production capability and capacity both to satisfy the congressional mandate and to mitigate risks associated with plutonium aging.” (DOE/EIS-0573 at p. S-2)
- “Building the manufacturing capacity to produce at least 80 [pits per year] before the end of the decade is essential to maintaining a reliable nuclear deterrence. Many of the aging pits will have to be replaced with new ones in the coming years to maintain a safe and reliable nuclear stockpile and deterrence.” (Id. at p. 1-3)
- “In 2020, NNSA provided Congress with the findings, observations, and recommendations of the JASON Defense Advisory Group Phase One report, *Pit Aging* (JASON 2019). In that report, JASON urged ‘that pit manufacturing be re-established as expeditiously as possible in parallel with the focused program to understand Pu [plutonium] aging, to mitigate potential risks posed by Pu aging on the stockpile.’” (Id. at p. 1-3)
- “NNSA currently stages most plutonium pits at Pantex. Like the pits in the active stockpile, those pits are aging and this alternative would not mitigate plutonium aging risks or enable NNSA to implement enhanced safety features to pits to meet NNSA and DOW requirements.” (Id. at p. 2-27)

In addition to confirming the relevance of the information at issue, including the rejection of the “Only Reuse Existing Pits” alternative, these quotes are noteworthy because NNSA selectively references the 2019 JASON study, which the authors recognized was not a full and complete pit life study.³ Since NNSA did not give the authors sufficient time, JASON characterized its truncated effort as a “letter report” and listed the criteria by which a new and full pit life study should be done, which would be Phase 2. That second phase has now reportedly been completed but no portion of the report has been released even though it may have been received by NNSA in 2025. If NNSA is deliberately refusing to address this report in the draft PEIS and also suppressing its disclosure during the public comment period on the draft, such conduct would be improper and violative of NEPA.

Of further significance, perhaps demonstrating a pattern of ignoring unfavorable information, the draft PEIS omits any reference to the 2006 JASON Pit Life Study. That full study found that most pit types have minimum lives of more than 100 years and those that do not have clear fixes⁴ (pits

³ See “Letter Report,” JASON, November 2019, <https://irp.fas.org/agency/dod/jason/pit-aging.pdf>

⁴ Pit Lifetime, JSR-06-335, JASON, 2006, <https://nukewatch.org/wp-content/uploads/2023/05/pit.pdf>

now average ~43 years old). The draft PEIS also omits any reference to a 2012 Lawrence Livermore National Laboratory study that reaffirmed that plutonium is “aging gracefully.”⁵

As you may be aware, a federal judge found that NNSA had violated NEPA by not authoring a PEIS to address pit production to begin with. NNSA would further violate NEPA were it to fail to consider and address this information in the current PEIS. “An agency’s hard look [under NEPA] should include neither researching in a cursory manner nor sweeping negative evidence under the rug.” *Nat’l Audubon Society v. Dep’t of Navy*, 422 F.3d 174, 194 (4th Cir. 2005). NEPA also requires that the public have access to information directly relevant to the draft PEIS during the public comment period. *See e.g., Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349, 109 S. Ct. 1835, 1845, 104 L.Ed.2d 351 (1989) (“Publication of an EIS, both in draft and final form, also serves a larger informational role. It gives the public the assurance that the agency ‘has indeed considered environmental concerns in its decisionmaking process,’ [] and perhaps more significantly, provides a springboard for public comment”) (citations omitted).

We acknowledge that some portions of the materials in question may be classified and not subject to disclosure. The current DOE NEPA Implementing Procedures contemplate a similar scenario and provide that “[t]o the fullest extent possible, DOE will segregate any information that is exempt from disclosure requirements into an appendix to allow public review of the remainder of the NEPA document.” Sec. 4.1(b) at p. 19. The section also provides that if the material cannot be segregated or would result in the disclosure of “meaningless material,” DOE is still obligated to “prepare the NEPA document and use it in DOE decision-making.” *Id.* at Sec. 4.1(c). Given the history of the prior JASON study and report, and references to them in past NEPA analyses, it seems probable that a substantive portion of the document is capable of being segregated and released to the public. In fact, it appears that an unclassified summary of the report already exists. The unclassified portion of the document should be released immediately.

On June 15, 2026, my client Nuclear Watch New Mexico filed a Freedom of Information Act (FOIA) request and requested expedition precisely because of the pending closure of the PEIS comment period. On July 3, 2026, Nuclear Watch New Mexico received a response from NNSA dated June 23, 2026, which denied the request for expedition and gave no indication when the unclassified summary of the Pit Life Study might be released.

II. DOE’s “Special Study” on NNSA leadership and management of its plutonium pit production program

On August 11, 2025, DOE Deputy Secretary James P. Danly ordered the Office of Enterprise Assessments “to conduct a special study of NNSA’s leadership and management of the plutonium pit production mission and its associated projects at LANL and SRS.” He ordered it completed within 120 days which placed its completion date around mid-December 2025.

⁵ Plutonium at 150 Years: Going Strong and Aging Gracefully, Lawrence Livermore National Laboratory, 2012, <https://www.llnl.gov/sites/www/files/2020-05/pu150-str-dec-12.pdf>

The program to establish plutonium pit production at SRS has already experienced dramatically escalating costs and delays of at least five years. The contractor “re-missioning” the failed MOX Fuel Fabrication Facility into the Savannah River Plutonium Processing Facility (SRPPF) received poor marks in NNSA’s FY 2025 Performance Evaluation Report. NNSA has subsequently put the contract out for bid, which creates more uncertainty about the schedule.

Senator Elizabeth Warren and Representative John Garamendi submitted detailed questions to DOE, requesting answers by January 9, 2026.⁶ Among those questions was a request to release the special study, if completed. To our knowledge, DOE has not replied to Senator Warren and Representative Garamendi.

As Senator Warren and Representative Garamendi wrote in their December 16, 2025 letter as follows:

In August, the Department of Energy (DOE) issued a memorandum launching a special study into NNSA’s ‘leadership and management of the plutonium pit production mission.’ If properly conducted, this study should find that years of mismanagement have put billions of taxpayer dollars at risk with an unrealistic pit production schedule and goals. Simultaneously, NNSA is waiting for a pit aging study by JASON that may call into question the wisdom of the current pit production program. We urge you to seriously review the need for and scope of the program, as well as pause planned production at the secondary Savannah River site until NNSA has established basic programmatic guardrails to prevent additional waste.

The concerns this “Special Study” purport to address should be considered and disclosed as part of the PEIS analysis. The PEIS’s Preferred Alternative is the “Multi-Site Alternative” with simultaneous plutonium pit production at LANL and SRS.⁷ The overall feasibility of pit production at SRS given potential cost, construction and management issues is relevant to the evaluation of the overall feasibility of any alternative that calls for any amount of pit production at that site. When discussing the preferred alternative, the PEIS notes that while NNSA “prepares cost, schedule, and technical analyses separately” those factors will be considered “in preparation of [the] ROD.” DOE/EIS-0573 at p. 2-41. Information about those factors is believed to be contained in this “Special Study” and should be considered in the PEIS itself and shared with the public so that it may inform comments.

On December 22, 2025, my client Nuclear Watch New Mexico filed a FOIA request for the “Special Study.” On April 3, 2026, Nuclear Watch New Mexico requested that it be expedited. On

⁶ Joint letter to DOE Secretary Christopher Wright from Senator Elizabeth Warren and Representative John Garamendi, December 16, 2025, https://www.warren.senate.gov/wp-content/uploads/media/doc/letter_to_doe_nnsa_re_pit_production_mismanagement.pdf

⁷ DOE/EIS-0573, NNSA, April 2026, p. 2-4, <https://www.energy.gov/nepa/articles/doeeis-0573-draft-environmental-impact-statement-april-2026>

April 6, 2026, DOE denied the request for expedition and gave no indication when the special study might be released. There have been no further responses from DOE since then.

III. LANL's New Probabilistic Seismic Hazard Analysis

DOE Order 420.1C (*Facility Safety*) requires that all Management and Operating (M&O) contractors review and, if necessary, update the site-specific seismic hazard assessments at least every 10 years. This has potentially serious impacts because federal regulations require that if a new or updated PSHA demonstrates that the seismic hazard has increased beyond the existing facility design basis, LANL must trigger the Unreviewed Safety Question process. *See* 10 C.F.R. §§ 830.203, 830.204. This requires an evaluation of whether the existing Documented Safety Analysis (DSA) remains bounding and whether mitigation measures are necessary.

The pertinent section of the draft PEIS states as follows:

As the ongoing and future upgrades to modernize and extend the life of PF-4 are completed, PF-4 will continue to effectively conduct mission-related operations safely and securely into the foreseeable future (NNSA 2019). The Defense Nuclear Facilities Safety Board (DNFSB) has been engaged with NNSA on seismic safety of PF-4 since the Laboratory first identified elevated potential seismic hazards in 2009. In an August 2023 letter, DNFSB acknowledged that the Laboratory completed a probabilistic risk analysis and concluded that the seismic safety risk of PF-4 is acceptable. DNFSB found that NNSA's conclusion was technically defensible and that the accompanying peer review process was robust (DNFSB 2023). DOE/NNSA is updating the site-specific probabilistic seismic hazard analysis, which is expected to be released in early 2026.⁸

The draft PEIS was released in April 2026. It is now July of 2026 and the public comment period for the draft PEIS expires on July 16. Yet the updated LANL Probabilistic Seismic Hazard Analysis, which the DNFSB confirmed has been concluded and approved for several months, has not been publicly released.⁹ Even the earlier analysis conducted prior to August 2023 referenced in the draft PEIS has not, upon current belief, been produced. Assessing seismic hazards and attendant risks at a proposed pit production site that is the preferred alternative with the most recent information is necessary for the hard look at potential environmental consequences under NEPA the PEIS is supposed to afford. NEPA also mandates that the public have access to this recent

⁸ DOE/EIS-0573, NNSA, April 2026, p. 2-13, <https://www.energy.gov/nepa/articles/doeeis-0573-draft-environmental-impact-statement-april-2026>

⁹ Los Alamos National Laboratory Resident Inspectors Activity Report for Week Ending May 22, 2026, DNFSB, <https://www.dnfsb.gov/sites/default/files/2026-06/Los%20Alamos%20Week%20Ending%20May%202022%202026.pdf>. Of note concerning its on-the-ground relevance to NNSA implementing its Expanded Operations Alternative at LANL: "Ground motion is an important input for evaluating facility and equipment response to design-basis seismic events. The contractor plans to incorporate the results of the new PSHA into site engineering and safety-basis documents."

information to inform meaningful comments prior to the expiration of the draft PEIS public comment period.

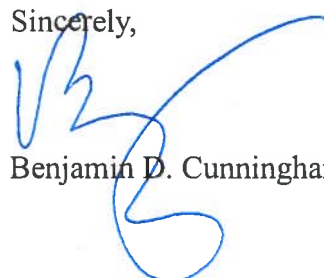
VI. Conclusion

We request that the unclassified executive summary of the new JASON pit life study, DOE's "special study" of its plutonium pit production program, and the most recent LANL Probabilistic Seismic Hazard Analysis inform and be considered in the PEIS. We also request the immediate release of the unclassified executive summary of the new JASON pit life study, DOE's "special study" of its plutonium pit production program, and the most recent LANL Probabilistic Seismic Hazard Analysis so that public comment can be properly informed by the information contained in these documents. In order to make the release meaningful for public comment, we insist that the deadline for the public comment period for the draft PEIS be extended by thirty (30) days from the date that NNSA publicly releases these documents or, if not released simultaneously, then the comment period be extended by thirty (30) days from the date the last document is released to the public.

It is imperative that you respond before the public comment period expires on July 16 and preferably within seven (7) days of electronic receipt.

Thank you in advance for your prompt attention to this matter and request.

Sincerely,



Benjamin D. Cunningham

cc:

Tom Clements, Savannah River Site Watch
Scott Yundt and Tanvi Kardile, Tri-Valley CAREs
Jay Coghlan and Sophie Stroud, Nuclear Watch New Mexico

Exhibit B

Witherspoon, R., Lavrenciuc, S., & Philippe, S. – Consequence Analysis of Major Fires at Plutonium Pit Production Facilities, July 10, 2026

SCIENCE & GLOBAL SECURITY
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RESEARCH ARTICLE



Consequence Analysis of Major Fires at Plutonium Pit Production Facilities

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ABSTRACT

As the United States reestablishes large-scale plutonium pit production, federal agencies have published environmental impact studies estimating radiological consequences from major facility fires in New Mexico and South Carolina. These analyses predict average latent cancer fatalities in the single digits but do not evaluate total cancers or remediation costs from land contamination. Using atmospheric transport and dispersion modeling, this study independently estimates downwind plutonium deposition and inhalation, cancer risk, and land contamination across meteorological conditions for different source terms. For assumptions consistent with current federal analyses, a 1-kilogram respirable release could produce up to 21 latent cancer fatalities, with total cancers three times higher. Tens of square kilometers of land could require billions of dollars in soil remediation, while contamination in residential areas could require evacuation. Larger releases involving different fire conditions and smaller particle sizes could cause over 1,000 fatalities, suggesting current assessments may underestimate accident consequences.

ARTICLE HISTORY

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Introduction

The United States is modernizing its nuclear arsenal and has committed to reestablishing a national capacity to produce plutonium pits, the fissile-material components in the “primaries” of thermonuclear weapons. The National Nuclear Security Administration under the United States Department of Energy (DOE) has assigned this mission to Los Alamos National Laboratory (LANL) in New Mexico and the Savannah River Site (SRS) in South Carolina, with planned production of 30 and 50 pits, respectively, per year by 2030.¹

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