



Savannah River Site Watch

August 12, 2019

Ms. Jennifer Nelson,  
NEPA Document Manager  
NNSA SRS Field Office  
P.O. Box A,  
Aiken, SC 29802  
By email to: NEPA-SRS@srs.gov

*Re: Comments on NNSA's Draft Supplement Analysis of the 2008 Complex Transformation PEIS that seeks to raise plutonium pit production from 20 pits per year to more than 80, via use of Plutonium Bomb Plant (PBP) at SRS*

Dear NEPA Document Manager:

These comments - via email and attached - are being submitted on behalf of Savannah River Site Watch, a duly registered non-profit organization that focuses on policies of the U.S. Department of Energy, with a primary focus on the Savannah River Site.

As the draft Supplement Analysis is deficient and offers no technical justification for the dramatic 400% shift in pit-production capacity requirements. I request that a new, legally mandated Programmatic Environmental Impact Statement, to supplement the 2008 Complex Transformation PEIS, be prepared. The draft Supplement Analysis fails to properly review these key matters outlined below, as required by NEPA.

If a determination is made that no new, required PEIS is to be prepared then I request that NNSA halt the entire NEPA review process for expanded pit production.

First, I request that a nuclear non-proliferation assessment be prepared on production of new pits and the nuclear warheads that would be outfitted with such pits. As it appears that all new pits would go to a single warhead - W87-1-like warhead - there are proliferation concerns with deployment of such a new warhead and such concerns, including compliance with the Treaty on the Nonproliferation of Nuclear Weapons, must be analyzed in an assessment attached to all relevant NEPA documents and the PEIS. Likewise, steps that NNSA could take to avoid manufacturing pits for an unneeded warhead must be presented.

Second, I request a full assessment of the ability of staff at the Savannah River Site to produce pits in the proposed Plutonium Bomb Plant (PBP), a project unfunded and unauthorized by Congress. SRS has no expertise in alloying plutonium with gallium nor with handling and casting liquid plutonium. Creating such pit-fabrication expertise from point zero will be a long, arduous and uncertain path with unknown outcome. As SRS only has some expertise in storing plutonium, processing plutonium into oxide (with such work now terminated) and downblending plutonium for disposal in the Waste Isolation Pilot Plant, it totally lacks any experience related to pit fabrication. Claims that SRS can develop expertise and begin pit production must be substantiated via technical documents that are part of the NEPA and PEIS record. As it stands now, the record shows that SRS would be unable to produce pits as presented by DOE's ambitious proposal.

Third, I request that the NEPA and PEIS record include a thorough analysis of the state of construction and design at the Mixed Oxide Fuel Fabrication Facility (MFF) and what it would take to convert the poorly constructed MOX plant to a Plutonium Bomb Plant, including costs. The MOX plant option for pit production has never been reviewed in depth and that analysis must initially be done via a new PEIS, followed by a site-specific EIS. The analysis of the MOX plant must include status of embedded and through-wall components and if such components were installed correctly and if they meet design, quality control and operational standards. And, given the botched MOX plant construction job, will contractors CB&I Areva MOX Services or contractors affiliated with them be used for the pit mission? (Such contractors and their NNSA managers, who failed in their mission, should be banned from further work on construction projects for NNSA or DOE.) As there is no documented evidence that the MOX plant could be converted to pit production, this analysis must include professional analyses certified by nuclear and construction engineers. Unsubstantiated claims that the MOX plant can be used for pit production will undermine any DOE proposal for use of the MOX plant for pit production.

Additionally, the cost and difficulty of converting the partially finished MOX plant to a permanent Category-1 fissile material storage and processing facility must be discussed in depth. Currently the K-Area plutonium storage facility is the only permanent Cat-1 facility at SRS and creation of a second facility will be costly and pose security and environmental risks that must be analyzed.

Additionally, no reuse of the MOX plant should be finalized until there are full investigations into waste, fraud, abuse and mismanagement with the MOX project and the bungled construction of the Mixed Oxide Fuel Fabrication Facility. Investigations by Congress and government agencies into the MOX debacle are essential before any reuse of the MOX plant can even be considered. Simply sweeping the problems with the MOX debacle under the rug will be a DOE recipe for failure of any pursuit of a Plutonium Bomb Plant at SRS.

Fourth, the role of the mothballed Waste Solidification Building (WSB) at SRS must be fully analyzed and presented in the PEIS. The WSB was built to handle MOX waste and not pit waste. The construction status of the building has also been questioned and there must be a fully certified (by engineers) analysis included for the NEPA and PEIS record. Simple claims that the WSB can be used for plutonium and chemical waste processing will be insufficient to make the case for such use. The NEPA and PEIS documents must show disposal paths out of the WSB, if it were to be used, describing in detail both off-site and on-site disposition methods.

The stated purpose of the National Nuclear Security Administration's (NNSA's) *Supplement Analysis of the 2008 Complex Transformation Programmatic Environmental Impact Statement* is:

“... to allow NNSA to determine whether, prior to proceeding with the effort to produce plutonium pits at a rate of no fewer than 80 pits per year by 2030, the existing Complex Transformation SPEIS should be supplemented, a new environmental impact statement should be prepared, or no further *National Environmental Policy Act* (NEPA) analysis is required. The Draft SA [Supplement Analysis] preliminarily concludes that further NEPA documentation at a programmatic level is not required; however, NNSA will consider comments on this Draft SA and publish a Final SA.”

To meet legal NEPA requirements NNSA must complete a new programmatic environmental impact statement (PEIS) on its nation-wide plans for expanded production of plutonium pits, the radioactive cores of nuclear weapons. Simply amending the Record of Decision for the 2008 Complex Transformation (CT) PEIS, as NNSA plans to do, will not be sufficient to formally raise the level of production from the level of 20 pits per year at the Los Alamos National Laboratory (LANL) sanctioned by the original 1996 Stockpile Stewardship and Management PEIS. This is because of numerous changed circumstances and much new information and an existing 1998 court order that requires DOE to prepare a supplemental PEIS when it plans to produce more than 80 pits per year.

Further, a new PEIS is required because NNSA proposes simultaneous pit production at two sites, which the Complex Transformation PEIS never considered. NNSA's new plan involves the production of at least 30 pits per year at the Los Alamos Lab and at least fifty pits per year at the Savannah River Site (SRS), which would be a completely new mission there. This is inherently a "programmatic" decision, sufficient justification by itself for a new PEIS.

NNSA plans to establish pit production at SRS by "repurposing" the failed MOX Fuel Fabrication Facility (MFFF). To use the Department of Energy's own NEPA regulatory language, a new PEIS is required because the expansion of pit production at LANL and the repurposing of the MOX Facility at SRS are "systematic and connected agency decisions" that are clearly "connected," "cumulative," and "similar" actions, therefore "their environmental effects must be considered in a single impact statement." Accordingly, DOE's own NEPA regulations require the preparation of a PEIS.

Moreover, convincing conclusions by independent experts further reinforce the need for full programmatic review. For example, the Institute for Defense Analysis recently concluded that NNSA's plans for expanded plutonium pit production will be "extremely challenging" and calculated that NNSA has never completed a facility costing more than \$750 million in less than 16 years. Nevertheless, NNSA improbably claims pit production will begin at SRS by 2030. This is throwing bad money after bad money given the 7 billion in taxpayer dollars that NNSA has already wasted on the MOX Facility.

The Supplement Analysis claims that the drivers and requirements for expanded plutonium pit production have remained the same. To the contrary, they have substantially changed, further underlining the need for a new PEIS. Why is no pit production scheduled to maintain the safety and reliability of the existing nuclear weapons stockpile? Instead, NNSA's changing rationale for expanded production has been for speculative new-design nuclear weapons that end up being canceled, such as the past "Reliable Replacement Warhead" and "Interoperable Warhead." It is imperative that a new PEIS clearly and consistently define the specific needs and requirements for expanded plutonium pit production, especially given that up to 20,000 existing pits are already stored at the Pantex Plant near Amarillo, TX, and independent experts have found that existing pits have reliable lifetimes of more than a century.

Further, NNSA does not plan to produce exact replicas of existing pits. Therefore, a new PEIS should analyze how heavily modified pit designs could undermine confidence in stockpile safety and reliability, thereby possibly degrading national security and prompting a return to full-scale testing. A new PEIS must instead consider the extensive reuse of existing plutonium pits as a serious alternative to expanded pit production that is less harmful to the environment and will save taxpayers' money.

A new PEIS is also needed to analyze the occupational and public risks of repeated, chronic nuclear criticality safety infractions at LANL and how to resolve them. By extension this applies to any future pit production at SRS as well. A genuine, comprehensive nuclear safety regime needs to be instituted at a programmatic level that must be analyzed in a new PEIS. It must also fully review potential risks to the public by apparent systemic attempts by DOE to degrade institutional safety, such as relaxing internal nuclear safety rules and restricting access of the independent Defense Nuclear Facilities Safety Board (DNFSB). The oversight role of the DNFSB in planning and possible implementation of pit production must be analyzed and presented.

The risks of increased transport of plutonium between NNSA sites must be analyzed in a new PEIS. The only repository for transuranic radioactive wastes from plutonium pit production is the Waste Isolation Pilot Plant (WIPP) in southern New Mexico. New programmatic review is required to analyze all of the increasing radioactive waste disposal demands on WIPP, which include wastes from future expanded pit production, 34 tons of existing "surplus" plutonium and possible disposal by DOE of some reclassified high-level radioactive wastes. A new PEIS must guarantee that all future transuranic waste packaging and shipping will be safe, given that LANL sent an improperly prepared waste drum to WIPP that ruptured and closed that facility for nearly 3 years, costing the American taxpayer \$3 billion to reopen.

The new PEIS must be completely free of predetermination. NNSA must demonstrate that it can pursue an impartial process without predetermination that leads to an objective decision to repurpose the MOX Facility or not. The new PEIS must seriously analyze its as-built quality and demonstrate that it indeed can be “repurposed” for expanded plutonium pit production. The extent of problems with construction of the MOX Facility, underscored by the government’s false-claims lawsuit against the MOX contractor, may well preclude its reuse for pit production.

The new PEIS should analyze the impacts of diverting taxpayer dollars to new nuclear weapons facilities instead of cleaning up the massive environmental damage caused by past research and production. What are the long-term public health and environmental effects of leaving radioactive and toxic contaminants that can pollute precious water resources, while new, unnecessary, and costly nuclear facilities that will produce more contaminants are being built? To reiterate, given the deteriorating arms control climate and a potential new nuclear arms race, a new PEIS must analyze the potentially adverse impacts of expanding plutonium pit production on the global nonproliferation regime. This includes any adverse impacts on the NonProliferation Treaty which the U.S. signed in 1970 but has never honored its mandate to enter into serious negotiations leading to global nuclear disarmament.

All analyses in a new PEIS must address the risk to the most vulnerable, that is pregnant women, fetuses, children and the elderly, rather than the standard, less vulnerable “Reference Man.” The comment period for a draft PEIS should be at least 120 days. All cited reference documents in the final SA and the draft PEIS must should be made immediately accessible online upon the release of the documents.

I request to be placed on any email lists for the status of NEPA and other NNSA documents on pit production: [srswatch@gmail.com](mailto:srswatch@gmail.com).

Sincerely,

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