



# Los Alamos Study Group

*Nuclear Disarmament • Environmental Protection • Social Justice • Economic Sustainability*

July 25, 2019

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Sent today by email to [NEPA-SRS@srs.gov](mailto:NEPA-SRS@srs.gov)

## **Comments on the scope of the Environmental Impact Statement (EIS) for plutonium pit production at the Savannah River Site (SRS)**

1. The purpose of the National Environmental Policy Act (NEPA) is to illuminate pending agency choices about major federal projects with significant impacts on the environment. Under NEPA, EISs must be prepared before, not after, agency decisions. By choosing to conduct an EIS for pit production at SRS, we understand that the National Nuclear Security Administration (NNSA) has not yet decided to conduct pit production operations at SRS. It is important to note, and we are pleased to note, that NNSA's pit production [recommendation](#) of May 2018 was not an illegally premature commitment to particular alternatives at either SRS or the Los Alamos National Laboratory (LANL). NNSA has time to "do NEPA right." We encourage you to do so.
2. The pit production program, regardless of where it is conducted, is inherently national in scope, with national environmental impacts, as the [Draft Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement](#) (DOE/EIS-0236-S4-SA-02, Jun 2019) makes clear. These impacts will be both direct, from the pit production activities themselves, their waste products and effluents, and so on, and also indirect, through the impact of pit production on other Department of Energy (DOE) and NNSA programs such as environmental remediation, the disposition of surplus plutonium and legacy wastes, environmental cleanup, transportation, stockpile stewardship and management, nuclear materials storage, and the operation of the Waste Isolation Pilot Plant (WIPP). These direct and indirect national impacts will, together, be sweeping in scope and must be understood on a national basis in order to discern the environmental impacts of pit production alternatives at SRS.
3. The choice between alternatives in any SRS pit EIS, which must include at least one no-action alternative, will have major impacts at and surrounding LANL in particular. That is, the scope of any SRS pit EIS includes major impacts at LANL. NNSA is currently analyzing whether pit production alternatives have unanalyzed impacts at and around LANL which merit fresh environmental review. They do, but first they must be understood on a national basis.
4. The Council on Environmental Quality (CEQ), which was set up by NEPA and which provides guidance to agencies about NEPA, issued an applicable Memorandum on December 18, 2014 ("[Effective Use of Programmatic NEPA Reviews](#)"). Without going into details, pit production *quintessentially* requires programmatic analysis, prior to site- and project-specific analysis.
5. The environmental impacts of pit production at the main sites, whether at SRS or LANL, cannot be understood except in the context of overall (site-wide) impacts, given the large number of foreseeable connected actions and cumulative impacts involved, which span not just NNSA's programs but also DOE's. Attempting to segment pit production from these wider impacts would be illogical and illegal.

6. We note that the IDA studies recently completed ([here](#) and [here](#)) emphasize the danger of rushing into pit production “half-cocked,” in so many words, as NNSA is often wont to do. A careful, tiered NEPA approach will provide maximum utility to the NNSA decisionmaker, who can use the NEPA process as it was intended, to vet agency proposals. It often happens that poor engineering is exposed by NEPA analysis, leading to a better project, while also creating venues in which new information can reach the decisionmaker.
7. We may be mistaken, but we are unaware of any Site-Wide EIS (SWEIS) for the SRS site. The most recent LANL SWEIS is 11 years old, and incorporates many major assumptions about pit production facilities and the environment which no longer apply or are now known to be false.
8. If DOE and NNSA wish to make more than 50 ppy, or to make pits at any site other than LANL, these agencies are under a legal obligation to the Los Alamos Study Group (LASG) and other parties to produce, at a minimum, a Supplemental Analysis to the 1996 Stockpile Stewardship and Management Programmatic EIS (SSMPEIS), a requirement NNSA has previously acknowledged. We discuss this specific obligation to this organization in a memo to Administrator on Feb 5, 2019 (“[Legal concerns regarding NNSA’s pit production plans](#)”).
- 9. Putting these considerations together, the only logical and legal way for NNSA to proceed with NEPA compliance for pit production is to conduct a national programmatic NEPA analysis first, and then proceed as necessary to new NEPA SWEIS analyses at zero, one, or two main affected sites, as needed. Project-specific analyses can be done as part of the new SWEIS(s), or separately, or later, as appropriate. This is our central recommendation.**
10. Whether or not NNSA chooses to conduct a national, programmatic analysis, at this time we think NEPA analysis for pit production at SRS must consider at least five alternatives, of which the first two could be characterized as “no action” alternatives as far as SRS is concerned:
  - a. No war reserve (WR) pit production, though qualification pits would be built. This is a reasonable alternative – in fact it has been Department of Energy (DOE) and NNSA policy and practice in all but four years since 1989. NNSA, DOE, and DoD have previously said all deployed pits will last until at least 85 years from production, i.e. until at least 2063. The JASON group of defense scientists is currently under contract to update their 2006 review of pit aging. If they determine that pits are aging to a degree that indicates altogether new pits, not just rebuilt pits, must be placed in the stockpile much sooner than this, NNSA could argue that this was not a reasonable alternative – although that would beg the question of whether there were any reasonable alternatives to the particular warhead(s) or bomb(s) in question.
  - b. WR pit production up to 20 pits per year (ppy) at LANL. NNSA could argue that this was a “no action” alternative supported by four prior Records of Decision (RODs), namely those of [Sept. 20, 1999](#), [Sept. 26, 2008](#), [Dec. 19, 2008](#), and [July 10, 2009](#). In its [Notice of Intent](#) (NOI) for this EIS, DOE concedes this limitation.
  - c. WR pit production of 50 ppy or “at least 50” ppy at SRS, as the latter is defined in NNSA’s Program Requirements (see [Analysis of Alternatives](#), p. 13).
  - d. WR pit production of 80 or “at least 80” ppy at SRS. It is likely – nay, virtually certain – that pit production at LANL will be paused for short or long periods as it has been since 2011,

which could result in a requirement to “surge” production at SRS. This has always been contemplated.

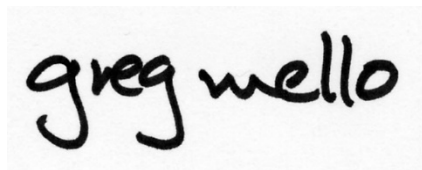
- e. WR pit production at some larger rate than 80 ppy, delayed by 5 or 10 years to 2025 or 2040. NNSA should find this reasonable because a) NNSA believes its cumulative pit production requirement is reasonable and b) the [Institute for Defense Analyses](#) (IDA) and [NNSA itself](#) have found that pit production will almost certainly be significantly delayed in any case. Regardless of what NNSA may now say, we can foresee circumstances in which future NNSA leaders will be tempted to operate any SRS pit production at a higher tempo than currently contemplated.

11. We would like to include in these comments by reference:

- a. Our letter to Senator Udall of July 8, 2019 (“[National Environmental Policy Act \(NEPA\) compliance for plutonium pit production](#)”);
- b. [LASG comments on the “Draft Environmental Assessment \[EA\] of Proposed Changes for Analytical Chemistry \[AC\] and Materials Characterization \[MC\] at the Radiological Laboratory/Utility/Office Building \[RLUOB\], Los Alamos National Laboratory \[LANL\],”](#) Apr 25, 2018; and
- c. LASG “[Pit production recommendations & considerations,](#)” memo to NNSA Administrator Lisa Gordon-Hagerty, Apr 6, 2018.

The first of these is attached in the present document below.

Best wishes, and thank you for your attention and consideration,

A handwritten signature in black ink that reads "greg mello". The signature is written in a cursive, lowercase style.

Greg Mello, Executive Director



# Los Alamos Study Group

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July 8, 2019

## **Re: National Environmental Policy Act (NEPA) compliance for plutonium pit production**

Dear Senator Udall –

In Senate hearings, you have been outspoken in promoting a greatly expanded pit production mission for Los Alamos National Laboratory (LANL). The environmental impacts of this mission – without precedent at LANL in scale and in impacts, both immediate and long-term – and of realistic alternatives to this mission, remain unexplored at this time.

### **We are therefore writing to ask you to demand that the Department of Energy (DOE) prepare, at a minimum:**

- 1. A new Site-wide Environmental Impact Statement (SWEIS) for LANL** which objectively analyzes – using realistic, up-to-date assumptions, and with state, tribal, other federal, and public input as required by law – the environmental impacts of industrial production of plutonium warhead cores (“pits”) at LANL, including its impact on risk reduction and cleanup efforts across LANL. De-inventory and subsequent closure of the Area G waste disposal and storage site are particularly at risk, because these multi-decade activities strongly compete with the shipments of newly-made waste that would be required by the new pit mission. The existing SWEIS (from 2008) is badly outdated and relies upon a number of key assumptions which are no longer true.
- 2. A Supplement to the Complex Transformation Supplemental Programmatic Environmental Impact Statement (CTSPEIS)**, which analyzes the environmental impacts of pit production and related waste management and disposal alternatives on a nationwide basis, including its impact on the Waste Isolation Pilot Plant (WIPP) and on environmental cleanup programs nationally, including at LANL, again with state, tribal, other federal, and public input as required by law.

In its 2017 [Analysis of Alternatives](#) (AoA) for pit production, NNSA assumed it would write a new environmental impact statement (EIS) for pit production, wherever that work took place. As explained below, NNSA is now backtracking from this approach.

Later this month we will provide DOE, and you, a detailed outline of why its existing National Environmental Policy Act (NEPA) analyses are woefully inadequate. We make this request now, in advance of that outline, because we feel the need for these two new analyses ought to be self-evident given the magnitude of the impacts and risks involved as well as the age and inapplicability of existing analyses.

Your early intervention would get DOE started on the right path sooner.

In addition – *and this is unprecedented in our 30 years of experience with these programs* – there is no actual plan for pit production, not even a conceptual plan or project data sheets for the associated projects, especially at LANL. To the extent there *are* plans, nothing has been revealed to the affected publics, tribes, local governments, and states.

At the same time there are unprecedented contradictions in official reports and statements about this program, leading one senator to remark – we believe accurately – that NNSA appears to be “making up the program as it goes along.” NNSA is currently committed to pit production deadlines and strategies which its consultants and

internal experts have more than once said are impossible. EISs are especially valuable when programs are in such turmoil.

By [law](#), NNSA must provide a detailed plan for production at LANL “of plutonium pits 31–80, in case the [SRS] facility is not operational and producing pits by 2030.” Studies by the Institute for Defense Analyses (IDA) for the [Department of Defense](#) (DoD) and [NNSA](#) in 2019 as well as by NNSA in [2017](#) have said this goal is likely unachievable.

**We believe it is strongly in the public interest to release these three documents, redacted as necessary. We would like you to facilitate that.**

The classification status of the first, the detailed plan for production of up to 80 ppy at LANL, is unknown to us. Obviously no assessment of environmental impact of this mission can be prepared or reviewed without at least a redacted plan of what the mission entails.

The second document, the IDA study for DoD, is Unclassified Controlled Nuclear Information (UCNI). Upon information and belief, only minor portions of that document are properly labeled UCNI.

The third, the IDA study for NNSA, is labeled Official Use Only (OUO). We believe this labeling is altogether improper.

### **Partial background**

A re-start of plutonium “pit” production in quantity is desired by the Trump Administration, though new pits are [not needed for decades](#) for the purpose of maintaining the current U.S nuclear stockpile. The new pits are needed for a proposed new warhead, the W87-1, to be deployed on the planned Ground Based Strategic Deterrent (GBSD), which is to replace the current fleet of 450 Minuteman III (MMIII) missiles in ground-based silos in the early 2030s. The W87-1 will replace the W78 warheads currently deployed on approximately one-half of the MMIII missile fleet.

Since late 2014 [current law](#) has required LANL to produce not less than 10 pits in 2024, 20 pits in 2025, and 30 pits in 2026. NNSA has repeatedly committed to meeting these goals and to begin producing at least 80 ppy by 2030. NNSA believes such a capacity, operating on a single production shift, would produce at an average rate of 103 ppy ([p. 13](#)).

Currently, pit production at LANL has been repeatedly limited to a maximum of 20 ppy by formal agency decisions taken over the 1996-2008 period, as we have [explained](#) and now NNSA [admits](#) (in more detail [here](#)).

Where major federal actions threaten significant environmental impacts, as is admittedly the case with any program to produce plutonium pits, NEPA requires agencies to objectively analyze the environmental impact of all reasonable alternatives prior to making decisions that irreversibly commit federal resources, incur environmental impacts, or bias agency decisions.

On May 10, 2018 NNSA announced its [decision](#) to make plutonium pits at two sites, LANL and the Savannah River Site (SRS) in South Carolina. On June 10, 2019 NNSA announced its [intent](#) to prepare an environmental impact statement (EIS) for the SRS part of this strategy, and to study whether or not to prepare a pit-production-specific Supplement to the [Complex Transformation Supplemental Programmatic Environmental Impact Statement](#) (CTSPEIS).

NNSA is preparing a SA [Supplement Analysis] to the Complex Transformation SPEIS related to the proposed action for pit production. NNSA will use the SA to determine if there are significant changes in the proposed action which are substantial and relevant to environmental concerns or whether new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts are significant. The SA would inform the site-specific documentation for the proposed pit production activities at both SRS and LANL. Although pertinent regulations do not require public comment on a SA, NNSA has decided, in its discretion, that public comment in this instance would be helpful and will issue a draft SA.

If the SA identifies no new significant circumstances or information relevant to environmental concerns that effect NNSA's decisions concerning pit production at a programmatic level, NNSA would announce the determination from the SA to the Complex Transformation SPEIS at the same time it would announce an amended ROD. If NNSA determines that a supplement to the Complex Transformation SPEIS or a new EIS is required, NNSA will announce those decisions as appropriate.

In addition,

NNSA also intends to conduct site-specific NEPA analysis for expanded pit production activities at LANL to determine if there are significant changes in the proposed action which are substantial and relevant to environmental concerns or whether new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts are significant. The type of site-specific analysis for producing a minimum of 30 pits per year at LANL will include a SA to the 2008 LANL Sitewide Environmental Impact Statement [SWEIS]. Depending on the results of the site-specific review at LANL, NNSA may announce an amended ROD or prepare additional NEPA documentation for the proposed action.

Thus in its Notice of Intent NNSA neither commits to, nor rules out, a new or supplemented SWEIS at LANL, just as it neither commits to, nor rules out, a supplemented CTSPEIS.

The [draft SA](#) for the CTSPEIS became available for public comment on June 26, 2019. It analyzes “the potential impacts from producing up to 80 [ppy] at *both* LANL and SRS” (emphasis added). It concludes (p. 48) that no further programmatic (i.e. national) NEPA analysis is required, and that NNSA will write a LANL-specific SA “for the proposal to produce a minimum of 30 pits per year at LANL, with additional surge capacity, if needed, to meet the requirements of producing pits at a rate of no fewer than 80 pits per year by 2030.”

There has been a legal requirement for LANL to plan to make “no fewer than 80 pits per year by 2030” for almost five years. Since late 2014, LANL has been [required](#) not just to plan, but to actually demonstrate a capacity of 80 ppy by 2029 at the latest. (An amendment – Section 8102 of [S. 1790](#) – was recently passed by the Senate to omit this last requirement even while making the Administration's goal of at least 80 ppy by 2030 a matter of law.)

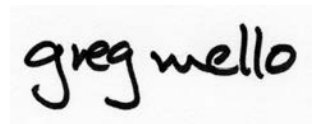
Since last year LANL has also been [required](#) to “implement surge efforts to exceed 30 [ppy] to meet Nuclear Posture Review and national policy” as well as to assess “the strategy...for manufacturing up to 80 [ppy] at [LANL] through the use of multiple labor shifts and additional equipment at PF-4 until modular facilities are completed to provide a long-term, single-labor shift capacity.”

The need for a new SWEIS and a supplemented CTSPEIS, at a minimum, is thus not at all new or peremptory. Such analyses, with the public processes required, are overdue.

At LANL, it should be obvious that this is a very challenging mission, not least from the environmental and safety perspectives, for workers and the public alike. We have written [extensively](#) on these topics. As regards NEPA compliance please see these recent resources:

- [“Administration announces plan to conduct environmental analysis of plutonium warhead core \(“pit”\) production in SC, no comparable commitment in NM,”](#) press release, Jun 10, 2019
- [“Administration to conduct environmental analysis of plutonium warhead core \(“pit”\) production in SC; may analyze NM production; NNSA’s plan may violate 1998 court order and other applicable law,”](#) press release, Jun 4, 2019
- [“Legal concerns regarding NNSA’s pit production plans,”](#) LASG memo to NNSA Administrator Lisa Gordon Hagerty, Feb 5, 2019

Sincerely,

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Greg Mello, Executive Director

Cc: Senator Martin Heinrich  
Governor Michelle Lujan Grisham  
Congressman Ben Ray Lujan  
Congresswoman Deb Haaland  
Tribes, local governments, federal officials, members of the public