

Tri-Valley CAREs

Communities Against a Radioactive Environment

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June 2, 2020

Ms. Jennifer Nelson
NEPA Compliance Officer,
National Nuclear Security Administration
Savannah River Field Office,
P.O. Box A, Aiken, South Carolina 29802
By email to NEPA-SRS@srs.gov

Re: Public Comment on the Draft Environmental Impact Statement (DEIS) for Plutonium Pit Production at the Savannah River Site in South Carolina, DOE/EIS-0541

Dear Ms. Nelson:

Tri-Valley CAREs is a non-profit organization founded in 1983 by Livermore, California area residents to conduct research, analysis, public education and advocacy regarding the potential environmental, health and proliferation impacts of the U.S. nuclear weapons complex, including but not limited to its Lawrence Livermore National Laboratory. In its capacity as a nuclear weapons complex “watchdog” organization, Tri-Valley CAREs is submitting substantive comments regarding the draft Environmental Impact Statement (DEIS) for Plutonium Pit Production at the Savannah River Site (SRS) in South Carolina.

We request every comment contained herein be recorded and responded to in the final EIS and that NNSA identify best available control measures to mitigate all environments impacts.

I. The Flawed Public Process Must be Remedied

The decision by NNSA to conduct and conclude this public comment period during a time of national emergency (the Covid-19 pandemic), stay-at-home-orders, and while people’s lives are disrupted in unprecedented ways circumvents the ability of the public to meaningfully comment on this DEIS. An extension of only 15 days, still during stay-at-home orders, did little to alleviate the hardship on interested parties. Making thoughtful, and thorough comments on this complicated topic and lengthy document, one that relies on other lengthy documents, has been very difficult in the allotted time.

Additionally, it has been uniquely difficult for interested parties to communicate with subject matter experts on specific applicable topics during this stay-at-home period because they are not in their offices and are hard, sometimes impossible, to reach. This amounts to a violation of NEPA’s

requirement that agencies make “efforts to provide meaningful public involvement in their NEPA processes.” CEQ NEPA Regulations, 40 C.F.R. §§ 1501.4(b), 1506.6(b).

For comparison, the NRC provided a sixty-day extension to the comment period for the EIS for the Holtec International proposed interim storage facility given the troubling circumstance brought on by the COVID-19 public health emergency.

The extension period for public comment on this DEIS should be for at least sixty-days following an announcement in the Federal Register, if not longer, given the current circumstances.

II. Necessity for a Programmatic Environmental Impact Statement under NEPA

The National Nuclear Security Administration’s (NNSA) plan to expand U.S. plutonium pit production to between 80 – 125 (or more) new bomb cores per year relies on two production facilities, the Savannah River Site in SC and the Los Alamos Lab in NM. Further, NNSA documents list seven more sites that are integral to its plan to expand pit production. They are: the Waste Isolation Pilot Plant in NM, the Lawrence Livermore National Lab in CA, the Nevada Nuclear Security Site, the Kansas City Plant, the Y-12 Complex in TN, the Pantex Plant in TX, and the Sandia National Lab in NM and CA. This totals nine facilities scattered across the map.

Instead of looking at the full picture, the NNSA has inappropriately fragmented its environmental review. This DEIS, which focuses solely on the Savannah River Site, is the only Environmental Impact Statement process that NNSA is presently undertaking on this project. (Two other NEPA reviews of the connected actions are each limited to a more cursory ‘Supplement Analysis’) As an overall matter, these obviously connected actions must be analyzed together with the “hard look” provided by an EIS. Prior to issuing a final EIS on the Savannah River Site, a comprehensive nationwide review of all of the interlocking sites and risks involved in this program, including transportation, should be prepared.

The best way to meet the legal requirements of NEPA would be to complete a Programmatic Environmental Impact Statement (PEIS) that outlines the nation-wide proposal to expand plutonium pit production. The agency decision to go with a Supplement Analysis and amended Record of Decision on a 2008 PEIS is insufficient given the substantial change in circumstances, among other reasons.

Moreover, it is stated that both production sites (LANL and SRS) would be working simultaneously to meet certain production goals. The DEIS states that in the event of the no-action alternative, production will be met solely by LANL. This clearly suggests that the two proposals are connected as part of a “larger action,” the effects of such a proposal must be “considered in a single impact statement.” §1508.25(3).

III. The DEIS’ Analysis of Alternatives is Inadequate

NNSA’s plan to expand pit production is being driven by a new warhead under development at the Lawrence Livermore National Lab, the W87-1.

According to public documents from NNSA, the Government Accountability Office and other agencies, this fully new weapon design will involve a novel plutonium pit, unlike anything in the stockpile or in

storage. The final EIS must analyze an alternative scenario in which the agency foregoes any new-design pits. How many newly produced pits would be needed by 2030 (the due date for both the new bomb plant and the W87-1 warhead) if not for new design pits? Instead the DEIS fails to provide adequate information on this issue.

Similarly, the DEIS is flawed because it does not adequately analyze a reasonable alternative involving the “reuse” of existing pits. There are some 15,000 to 20,000 plutonium pits in storage at the Pantex Plant, with lesser quantities stored elsewhere. Pit reuse is a proven technology. The final EIS must fully consider the role pit reuse could play before rushing full speed ahead with a new bomb plant at the Savannah River Site as well as plans to expand pit production at Los Alamos.

Moreover, the DEIS does not address the role of novel warhead design in stimulating a dangerous, costly new global arms race. The agency cannot ignore the directly related cause and effect of developing new weapons and producing new pits for them. The potential impacts of spurring nuclear proliferation must be seriously considered. New warhead designs using novel plutonium pits further introduces the potential for resumption of nuclear explosive testing at the test site in Nevada, an activity that was halted 1992. Such testing could involve considerable environmental impacts and international proliferation consequences that need to be analyzed in the final EIS.

IV. The DEIS’ Analysis of the Impact of Wastes is Inadequate

Pit production at SRS would produce a host of chemical and nuclear waste streams. The DEIS shortchanges the analysis of their risks. Is dumping of low-level nuclear waste in unlined trenches being considered? Waste containment and management at the Savannah River Site has been problematic; the site was placed on the EPA “Superfund” list in 1989. The final EIS must comprehensively analyze the impacts of new production alongside the leaking wastes already in the environment.

Additionally, past pollution should be remedied before new wastes are heaped on top of preexisting impacts from past programs. This fundamental issue is not fully addressed in the DEIS. Indeed, pit production could distract from the main mission of the Savannah River Site and its largest amount of funding, which is, cleaning up tens of millions of gallons of waste products left over from past production of plutonium and nuclear weapons materials at the site.

V. Health Hazards to Workers and the Public Must Be More Fully Considered

Industrial scale plutonium pit production last took place at the Rocky Flats Plant in CO. It was shut down in 1989 following a raid by the FBI environmental crimes unit and the EPA. A full analysis of the Rocky Flats experience is lacking in the DEIS and must be included in the final EIS.

Plutonium fires at Rocky Flats created airborne pollution for miles around the site, reaching nearby towns and even the City of Denver. The full impacts of a plutonium fire at the Savannah River Site must be included in the final EIS. EIS should also identify any and all known pollutants that might be hazardous to people, other life forms, and the environment.

The analysis must include site workers, first responders, and communities near the Savannah River Site, including Barnwell, SC and Shell Bluff, GA. The residents of these communities are primarily low-income and historically disadvantaged people of color. What is the plan to safeguard them? What about workers?

The DEIS also lacks other information needed to appropriately assess risks. The process for producing pits at the Savannah River Pits must be better defined in the final EIS. Similarly, a thorough discussion of the specific technology to be used to purify plutonium for new pit production must be included in the final EIS, with a full accounting of its potential health impacts.

VI. Surge Capacity

The DEIS explains that the facility will have a “surge capacity” or “short-term surge capacity” that will enable the facility to build additional pits, up to 125 per year. The draft document fails to define the terms “surge capacity” or “short-term surge capacity.” These are terms with which the general public has no experience, and this makes public analysis of the proposal at hand difficult. Please clarify what these terms mean.

Additionally, please provide details of how the agency will determine what conditions merit ordering the “surge.” For example, it is likely that pit production will lag behind schedule. Is falling behind on a weapon’s schedule due to internal agency conditions a sufficient reason for ordering a “surge” in capacity?

Also please describe in more detail the differences between operating at a surge capacity compared to how the conditions will be at the 50 or 80 pits per year level. For example, will the additional employees (which the DEIS indicates will be 520 over the 80 pits per year level) be temporary employees? Will they be trained to the same level? Will they come from other sites? Will safety or oversight be relaxed during these “surge” periods? How long are the surge periods expected to last? How often will the “need” for the surge be evaluated? Will the DNFSB be notified of the surge beforehand? Will DNFSB approval of the safety of the surge plan and its additional equipment be required before the surge is allowed to begin? How will the determination be made to end the surges?

Furthermore, additional waste of all types will be produced during these surge periods. Will the agency store waste (of all types) on site for longer periods of time during surges? Will there be a difference in the transport of waste during surge, i.e. more waste per shipment or more frequent shipments? Will onsite waste treatment capacity correspondingly surge? Will WIPP be given notice in order to prepare for the increase in TRU waste? How will the fact that WIPP is oversubscribed (and may not be available) be factored in?

VII. The DEIS Analysis of Intentional Destructive Acts is Inadequate

The potential destructive acts that could result from various terrorist or disgruntled employee incidents at the proposed facility are not adequately analyzed. The DEIS is heavily reliant on past NEPA reviews. Yet, the analysis provided by all previously relied upon NEPA documents is out of date given the rapid rate of technological innovation available to terrorists as well as ever changing potential terrorist

targets and threats. The final EIS must consider various scenarios (committed by both external and internal actors).

At a minimum, these situations should be analyzed in a similar fashion to the transportation accident analysis; where a range of high-probability, low risk and low-probability, high-risk scenarios were disclosed and discussed. For example, the final EIS should include an analysis of an employee or an intruder obtaining and removing plutonium from the site and then a non-state actor using it to detonate a dirty weapon or crude bomb in a nearby American city such as Charlotte or Atlanta.

This analysis would not be limited to probability analyses of the likelihood of such an incident. Rather the requirement is for an actual analysis of the potential environmental and human impact from such an intentional destructive act.

The DEIS states “If the proposed SRPPF and support facilities were used to produce 125 pits per year, the material at-risk and source term would not change compared to the 50 to 80 pit per year capacity SRPPF.” (at 4.11.2) This assertion summarily concludes that there is no additional risk posed from an accident or intentional destructive act during the surge periods. However, there is nothing offered to back this up. Other parts of the DEIS acknowledge the increase in waste, an increase in number of workers, and other risk factors that would increase the impact of an intentional destructive act, thereby requiring a more thorough analysis.

Additionally, the ability for vehicles to drive right up to the facility increases the potential for an intentional destructive act or accident at the facility involving a vehicle (such as a fire). The necessity for employee parking in such close proximity to the site should be analyzed more closely. An alternative that includes a remote parking lot with employee busing to the site should be analyzed. These concerns would be compounded during periods of surge production, particularly if a temporary or otherwise changed labor force were required to meet production goals.

Please acknowledge receipt of our comments. Thank you in advance for considering these comments and for responding to them substantively in the final EIS.

Sincerely,

Marylia Kelley
Executive Director

Scott Yundt
Staff Attorney

Angad Gangapuram
Summer Legal Intern