



Los Alamos Study Group

Nuclear Disarmament • Environmental Protection • Social Justice • Economic Sustainability

Comments on the

Draft Supplement Analysis (DSA) of the 2008 Site-Wide Environmental Impact Statement (2008 SWEIS) for the Continued Operation of Los Alamos National Laboratory for Plutonium Operations (DOE/EIS-0380-SA-06)

From

Greg Mello, Los Alamos Study Group

by email to lanlsweissa@nnsa.doe.gov, May 9, 2020 at 7 pm MST

Introduction

Any comments such as these have multiple audiences, including but not limited to the Department of Energy (DOE) and the National Nuclear Security Administration (NNSA). There is a need for an overview as well as for details.

First, as the occasion has warranted – usually as new information became available – we have written extensively on this topic, from the environmental, National Environmental Policy Act (NEPA), and policy perspectives since the Draft Environmental Assessment on the changed mission of the Radiological Laboratory, Utility, and Office Building (RLUOB) in February 2018, as well as before. We have formally commented on all available occasions in the NEPA context. A list of these comments and other writings is provided below, with active links, taken from this [page](#).

We have been professionally involved in these issues for some three decades, longer than most NNSA employees. We have often been proven right in our technical assessments.

Despite numerous requests, no technical or managerial person in NNSA has been willing to meet with us. Phone calls are almost never returned. Detailed letters are not even acknowledged. Legally-required reports are often not generated by NNSA and when they are, they are not released in an appropriately redacted form.

So our first comment is that, in our judgment, this is not a sincere process at all. This is important because NEPA largely proceeds on the “honor system.” We know there are many honorable and hardworking people in NNSA, but the agency as a whole does not usually act that way. At NNSA, the whole is usually less than the sum of the parts.

At this moment in our history together, many citizens are feeling lost and afraid. They are divided and distracted. Loved ones and perhaps they themselves are threatened by the COVID-19 pandemic. We all are threatened by the pandemic’s cascading secondary effects, economic and otherwise. In such circumstances all we can do is to hope that men and women of honor and principle will find the courage to follow our laws, including NEPA, with greater fidelity and sincerity than we see in this DSA.

This DSA is in many ways absurd on its face, as will be shortly explained. This comment period is, as you know, without any legal basis. It is a vestige of a vestige of rational, democratic government. You are not obligated to accept, read, or act on these comments, but it is to you, dear NNSA and DOE colleagues, that we nonetheless appeal. Thank you for your attention.

These comments could be referenced thoroughly. We have had other deadlines and so references will be sparse. *If references interest you, please do ask and we will supply them.* As stated, DOE and NNSA are under no legal deadline regarding these comments. Legally, they are entirely informal. So ask away, not just about references but also about anything that appears obscure or which might be in error. We are fully prepared to have an expert dialog, and have been for years.

By the way, we did not publicize this comment period because we didn't want to waste our members' time.

Second, we aren't going to comment here on nuclear weapons policy, or plutonium warhead core ("pit") policy, except to say that NNSA's legal mandate of producing at least 30 pits per year (ppy) by 2030 was considered unreasonable by NNSA itself in its Analysis of Alternatives (AoA) and by the Institute for Defense Analyses (IDA), both of which studies found this deadline virtually impossible. NNSA's 1999 analysis of pit production by the Defense Program Advisory Group (DPAG) found that a 14-year timeline from conceptual design to full production was reasonable; IDA found that DOE had never build any project costing more than \$700 million (M) in less than 16 years. So the mission need in this DSA is *legally required*, but in a practical sense *unreasonable*. A 2034 or 2036 deadline for production opens other alternatives, which this DSA suppresses. Regardless of one's views of nuclear weapons policy, we think roughly 2035 as an aspirational date for pit production more reality-based, as do the above two reports.

We favor nuclear disarmament over maintenance of a nuclear stockpile, or if that is not possible then deep cuts to the US arsenal, but those policies are not within the ambit of discussion here. A later production deadline should be, because it looks very much like this early deadline was crafted – in part by New Mexico senators – to increase NNSA spending in New Mexico, with little other rational justification.

We would like to see an alternative involving no pit production at Los Alamos National Laboratory (LANL), except for R&D, training, and pilot production.

We think this is much more reasonable than the alternative proposed. In June 2017 NNSA formally decided, for ample cause, that LANL's main plutonium (Pu) facility PF-4 could play no enduring role in pit production. LANL pit production at the required 80 ppy, should it occur, therefore required a new facility. NNSA and its consultants have said in multiple places that PF-4 is an aged facility and has a finite lifetime as a Hazard Category (HC) II facility, likely concluding in the late 2030s. Yet the prospect of a new HC II facility for Pu and specifically for pit production, is absent here.

In our view, very strong engineering, planning, and environmental considerations point to the Savannah River Plutonium Processing Facility (SRPPF) at NNSA's Savannah River Site in South Carolina as the much stronger contender for pit production.

- SRPPF is adequately sized and therefore flexible;
- It could easily produce 80+ ppy in a single shift instead of the planned 50 ppy for a very small incremental cost;
- NNSA has found in two studies (the AoA and the Engineering Assessment, EA) that it could be brought on-line faster, cheaper, and with less risk than a new facility at LANL, which will as we

are saying would be needed soon, possibly all but immediately due to the many safety deficiencies and unknowns at PF-4 and RLUOB;

- Unlike LANL, SRPPF is supported by adequate on-site waste handling facilities;
- It is ten times farther from the site boundary than PF-4 (6 miles vs. 0.6 miles);
- It has been constructed to Nuclear Regulatory Commission (NRC) licensing standards;
- It is brand-new;
- Unlike PF-4 it is very robust to natural hazard risks; and
- Much more.

Building two parallel pit production facilities at more than twice the cost – the first of which (i.e. the one inadequately described in this DSA) would need to operate 24/7 to achieve even 20 ppy, cannot last and would need to be substantially replaced starting in the 2020s, if indeed replacement of PF-4 is even possible; and at the same time building a second facility in a brand-new structure which could undertake the whole mission with single-shift operations – is folly. A new PF-4 is a \$10+ billion prospect, assuming it could be done, which we doubt.

Given the engineering realities, we wonder whether NNSA is building a short-term, “disposable,” pit production facility in New Mexico in order to placate the New Mexico senators – and, as long as luck holds, have two facilities for added capacity and redundancy.

LANL is a high-risk option, as we have explained (and NNSA understands). Trying to build two factories at once does not decrease NNSA’s failure risk. Quite the opposite.

What NNSA would sacrifice by building only one facility, at SRS, is the W87-1 pit production the agency hopes to get from LANL in the 2020s, which would enable a hoped-for first production unit (FPU) for the W87-1 in 2030. There are multiple reasons, as NNSA knows better than us, why that date is looking “challenging.” For example, the W87-1 radiation case is a high-risk component, as well as pits.

We think a roughly 2035 date, with an SRS-only plan as the proposed federal action, is far more reasonable than NNSA’s current plan, part of which is the subject of this DSA.

Neither the present DSA, nor the Draft SRPPF EIS, nor the Final SA of the Complex Transformation Supplemental Programmatic EIS, examines such an alternative. Although it was considered reasonable, even preferred in 2017 for strong engineering and managerial reasons, it is politically “off the books” now.

Other overarching concerns

Many of the specific problems we flag can be grouped under one or more of these headings.

1. **The scope of this DSA is too narrow. The title should be abridged to leave off the phrase “for Plutonium Operations” and the content expanded accordingly. The conclusion would then be quite opposite of this DSA: a new SWEIS is needed.**

LANL is presently engaged in a vast expansion, involving (LANL has said) \$13 billion in construction and other capital investment over 10 years. This figure would nearly double LANL’s

total asset value, as LANL assesses that value, and dwarfs all prior construction projects in the history of New Mexico. LANL and NNSA have said LANL plans to hire about net 1,000 people per year for several years. The impacts of this expansion are expected to be, as LANL has said in multiple public venues, regional and large.

To facilitate this expansion LANL has sought to open a second campus in Santa Fe. NNSA has submitted a formal application to develop at least 64 acres of City-owned land in central Santa Fe for this and related purposes.

LANL has said that a new bridge across the Rio Grande, and some 30 miles of new highways, is reasonable and possibly even necessary to gain access to the Albuquerque/Bernalillo/Rio Rancho labor and housing markets, to support this expansion.

Dozens of new structures are contemplated.

Pit production is part but by no means all of this proposed expansion.

What NNSA has done in this DSA is to compare a specific program to the impacts of the entire laboratory as foreseen in 2008, while omitting all other plans it has today, which have been portrayed in non-NEPA venues as reasonable and in some cases necessary federal actions and alternatives. So of course the impacts of a minority portion of the laboratory will appear less than the impacts of the lab as a whole, as they were foreseen in 2008. In NEPA, this is called “segmentation” and failure to consider “connected actions” and “cumulative impacts.”

Housing and road congestion are huge issues, as NNSA and LANL already understand. Both have been discussing these huge impacts with City of Santa Fe officials, but the full scope of these impacts is omitted here because the scope of this DSA is too narrow.

2. **A. The federal action proposed in this DSA is nowhere clear defined in this DSA.**

This comes into play in several ways. In broad terms, omitting many specifics:

- The number, size, and location of buildings to be constructed are usually all vague in this DSA.
- The proposed “surge” capacity to ≥ 80 ppy is not defined. Clearly it involves production at a higher rate over the better part of a year, if not a whole year. If one year why not two years, or three? The question is, how long is a “surge,” how great is it, and in what way is it different from “ ≥ 80 ppy” for several years, i.e. ≥ 80 ppy, *period*? As for the actual quantity implied, NNSA now defines “ ≥ 80 ppy” as “ ≥ 80 ppy” in 9 out of 10 production years, or about 103 ppy *on average*. The staffing required for this surge is vague as well; LANL “will evaluate” this – later.
- As we have already mentioned, we believe another HC II nuclear facility is a hidden part of this proposal, as was thought necessary in recent prior NNSA studies.
- It appears to us that much of the proposed action contemplated has been taken away from environmental analysis by stuffing it into the baseline program to support production at a rate of 20 ppy. Hiring 1,600 more people, running PF-4 and supporting facilities 24/7, constructing all the new facilities necessary to support this new

population of workers in round-the-clock work – all this is now said to be necessary to make one pit every 18 days or so. LANL made 11 pits in one year more than a decade ago. Reliable sources tell us NNSA now considers the existing pit workforce at LANL to number about 2,000 persons. Given this, this DSA is saying LANL needs 3,600 people to make 20 ppy, and then only 400 more to make 30 ppy *or possibly 80 ppy*. The nature and scope of this federal action are very poorly defined – purposely so, to retain “flexibility.”

- Related, NNSA and LANL have failed to produce plans for pit production and for the LANL that are required under other laws, regulations, and the LANL contract. Were these in place, NEPA analysis could be done on a solid foundation. As it is, there is no clear scope. NNSA’s plans have not been vetted by the usual means prior to NEPA analysis. That is why NNSA and LANL want “flexibility.” They don’t want to commit to specific actions, or to follow DOE project management rules. They cannot analyze the environmental impact of their proposed action because they don’t know, and don’t want others to know, what that action is or might become.

B. There are no alternatives proposed or examined.

NEPA establishes no acceptable or unacceptable impact levels. It is entirely procedural. The heart of NEPA is the *comparison* of impacts between a proposed federal action and its reasonable alternatives. In the case of this DSA there are no alternatives presented. NNSA might say alternatives were examined in the 2008 SWEIS, but the federal action NNSA is now actually proposing *in fact*, not just in the Alice-in-Wonderland world of this DSA, is very different from the actions contemplated in 2008 under very different conditions, and the alternatives to today’s action are also different. But they are nowhere articulated or examined.

3. The environmental and LANL conditions and context that NNSA assumed in 2008 no longer apply.

For example, there is now no Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR-NF), which was to be a major enabling HCII facility for pit production at LANL, capable of storing, shipping, and handling tons of plutonium. CMRR-NF never happened, in part for geotechnical reasons which also apply to other elements of the 2008 Expanded Operations Alternative and to other proposed HCII facilities at or near Technical Area (TA-) 55.

In other words, the 2008 SWEIS is in many ways bunk – obsolete.

To take another example, road congestion in the vicinity of LANL has reached a critical level. Adding a few thousand more workers, as LANL and NNSA have said is planned (in part for pit production, in part for other LANL missions), will have very different effect now, as then.

Housing is another example. The local housing market is now much tighter than before, in part because LANL staff are retiring locally in large numbers, staying in scarce local homes, a phenomenon which has increased since 2008.

To take another example, climate change has now become a far more critical concern than NNSA wrote in 2008.

Mere extrapolation and scaling from what is now the distant past cannot substitute for de novo analysis.

4. NNSA uses inappropriate “bounding analysis” to avoid actually specifying its proposed action and analyzing its impacts (as well as the impacts of reasonable alternatives) in an EIS.

Together with 1. above, this kind of NEPA “analysis” is virtually sure to result in no estimated added impact from the proposed action, and hence no need for an EIS.

This approach subverts the procedures of NEPA by comparing today’s estimated impacts from a proposed action with those estimated in the past for a somewhat different action, instead of comparing them with the impacts of today’s reasonable alternatives. The theory is that if the estimated impacts for today’s proposed action appear to be less than those of 12 years ago, which were in some sense assumed to be “OK,” they are “bounded” by those earlier analyses and need not be actually analyzed for today’s proposal.

At no time is a contemporaneous comparison of impacts between project alternatives made, contrary to NEPA.

Thus all increase in knowledge gained over the intervening years, and all the effects of pertinent events that have transpired, is not brought to bear. The result is basically trash.

The assumption behind this approach is exactly the opposite of NEPA’s controlling purpose, which is not to create paperwork (“documentation”) but to foster better federal choices, which necessarily entails competing alternatives (as NEPA requires).

Specific concerns

In reading the DSA carefully, we noted approximately 60 specific concerns, many of which have something to do with the above overarching problems we see in this DSA.

We do not include those here. As noted in the introduction and explained in our overarching concerns, we think this DSA is absurd. We also we lack the tiniest shred of evidence that NNSA is sincerely interested in comments.

The way to signal that interest would be to respond to our overarching comments with an announcement to conduct a new SWEIS. We would be happy to consult with you by Zoom or by telephone if you thought that would be helpful.

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