

May 30, 2020

Dear colleagues --

Over the last three days Kevin [Kamps, Beyond Nuclear] has sent out three emails suggesting specific kinds of comments, and now organizational sign-ons to a specific statement, for submission to the National Nuclear Security Administration (NNSA) as comments on its draft environmental impact statement (DEIS) for construction and operation of the Savannah River Plutonium Processing Facility (SRPPF), a factory to make plutonium warhead cores ("pits").

This effort has incorporated many factual errors, omits decisive issues and important social values, paints a misleading picture overall, and undercuts efforts to halt pit production in the crucial decade ahead.

Industrial pit production at Los Alamos National Laboratory (LANL) in the late 2020s will be necessary for the new W87-1 warhead plans to advance. According to NNSA, pit production is not needed in the 2020s for any other purpose.

If organizations want to stop pit production at the Savannah River Site (SRS), and I think many do, it is important to stop pit production at LANL *right now*, because LANL is the "prototype" (NNSA's word) and training facility for SRS.

Reading the various positions, letters, and hearing first-hand from some of these groups and from congressional staff, a very clear impression is given that they oppose pit production -- *in the 2030s, but not right now.* If they do oppose it right now, at LANL, we just don't see that happening. Quite the opposite, in fact.

One of the stock phrases we often hear is "no *expanded* pit production." Well, there is no -- zero -- pit production capacity at LANL now, and there won't be for some years. There should never be any, for fundamental reasons we have personally briefed (without rebuttal) to Union of Concerned Scientists (UCS) and many others.

We are concerned about a general disregard of facts. They can be inconvenient, but we have to step up to them.

Organizations signing onto this letter will be signing onto false statements. This effort is intended to have the practical effect of pushing pit production into one of the least appropriate sites that could be imagined from the safety perspective, which site also happens to directly abut sacred Native American lands of exceptional cultural and religious significance, in one of the most economically-precarious areas in the US.

There are simply a lot of misconceptions running around within the Alliance for Nuclear Accountability (ANA) on the pit production issue. We are especially disappointed in the letter reproduced below.

In 2017 NNSA, led by Obama holdover Frank Klotz, sought <u>one</u> "80+" pit per year (ppy) factory (modeled average production: 103 ppy). Given that relying on LANL's existing plutonium facility (PF-4) was impractical (an option officially rejected by Klotz as too old, too small, too many other missions, lacking safety systems, with seismic survival *still* unknown), the choice boiled down to building a new dedicated pit production facility at LANL at great cost and uncertain prospects of success, or repurposing the Mixed Oxide Fuel Fabrication Facility (MFFF), now called SRPPF. Regardless of which option was chosen, NNSA concluded in October 2017 that when pit production began in another facility, "PF-4 can return to the research and development mission for which it was built" (p. 2).

Since then, PF-4's safety posture has if anything declined ("<u>Safety Board: The Los Alamos plutonium facility</u> does not adequately protect the public," LASG letter, Dec 2, 2019). There is no funded plan to fix all the known problems at this facility, let alone any assurance of success or assurance that more problems won't crop up (see <u>slide 27</u> for an overview). LANL's numerous problems as a pit production site (<u>slide 26</u>) are for the most part well-understood in government. One committee staff member confided to us that he knows LANL will "fail" -- he just hopes not too many people will be hurt. Well, in the meantime a great many people in the region *will* be hurt, as the state doubles down on its nuclear dependency and identification, foregoes greener options, and/or state approval of the Holtec project becomes a political *quid pro quo* for continuing to boost LANL's budget despite its many problems and failures. The New Mexico senators frequently allude to the ongoing "contract" or "sacrifice" the state has made to accept nuclear waste in exchange for funding for the labs.

People may not understand that the LANL plutonium facility is just six-tenths of a mile from residences, while SRPPF is six miles from the property boundary. LANL seems big, but there are essentially no flat places to put a plutonium facility far enough away from a national monument, public roads, Indian reservations, houses, and earthquake faults. Beneath the surface at LANL's plutonium facility: many tens of feet of unconsolidated volcanic ash, incapable of arresting building motion in a design basis earthquake. The seismic accelerations possible are roughly the same as at the Fukushima nuclear plant.

As a direct result of political pressure from Democrats (especially New Mexico senators and NM Rep. Ben Lujan), abetted by some in the arms control community and some ANA groups, NNSA now seeks to build <u>two</u> pit factories, <u>each</u> with 80+ ppy capacity -- a sort of two-site Modern Pit Facility, for those who remember. And what pits will LANL make in the 2020s? Pits for the Reliable Replacement Warhead (RRW), which is essentially what the W87-1 is. Thus by looking the other way while LANL massively gears up, the ever-compromising arms controllers are sacrificing the victories of the mid-2000s.

For nuclear hawks this is a delightful outcome, especially as it front-loads commitment at LANL, successful production at which in the 2020s is required for the W87-1 schedule. I heard the head of Livermore's weapons program say, "Without pit production at LANL, we won't have a W87-1." Friends, it doesn't get clearer than that.

Turning to the Savannah River Site Watch (SRSW)/UCS letter below, the most shocking part is this:

Finally, we support the "no action alternative" whereby the poorly constructed MOX facility would not be converted to plutonium pit production and that this alternative not be linked to pit production at Los Alamos.

What?

The DEIS No Action Alternative reads, "Under the No-Action Alternative, the existing MFFF would remain unused and *NNSA would utilize the capabilities at LANL to meet the Nation's long-term needs for pit manufacturing.*" (emphasis added)

Saying "we support" an alternative doesn't change the *content* of that alternative to something else we might like more. Quite the opposite -- supporting an alternative affirms it.

There seem to be words missing, grammatically and logically. Perhaps it's too revealing to make the meaning explicit, which may be something like "*we wish* that this alternative not be linked to pit production at Los Alamos" or "*we prefer* that this alternative not be linked to pit production at Los Alamos."

But it is.

More subtly, the letter says

NNSA's plans for SRS and Los Alamos are inextricably linked and those plans should be reviewed in a single document, a PEIS.

Really? What about a Site-Wide EIS at LANL, which is planning and conducting a \$13 billion construction program over the coming decade, not counting the new plutonium facility that will be necessary if LANL is to keep this mission.

According to NNSA, LANL plans to have 4,000 people working on pit production by 2026 for the 30 ppy mission, more than Rocky Flats had for its first three decades. LANL is hiring 1,000 people a year, right now.

The regional impacts are already tremendous, yet no SWEIS is planned -- *and none is mentioned in this letter.* A PEIS on pit production will not encompass all these plans, which include pit production but also much more, let alone encompass them in enough detail. Right now, Los Alamos County is begging the Department of Energy (DOE) to give them more than 3,000 acres of national park quality land -- recently, Native American land like all the rest -- to accommodate some of the 5,000 additional housing units the County's consultants say will be required to support LANL's growth.

It is important to conduct a LANL SWEIS *now*, as construction has already begun, not after a PEIS. The imbalance between having an EIS at SRS, *where the impacts will be much less than LANL, both absolutely and in relation to existing activities at the site*, and a Supplement Analysis at LANL (which is basically a memo to file, without any legal basis for comment), is stark.

The alleged construction deficiencies at the NRC-licensed MFFF are almost laughable in comparison to the built-in major deficiencies of the 1970's-vintage LANL plutonium facility, or the shoddy analytical facility next door, which was never built as a nuclear facility but is being turned into one by variance and fiat to support pit production.

While it does not bear on the DEIS at all (so why is it being brought up in this sign-on letter?), I would also like to point out that the question of pit reuse is being mischaracterized here. There are not "15,000 or more" pits at Pantex *which could be used in weapons*. This is just another misleading statement. (In fact the deeper one goes into the pit reuse question the more complicated and problematic it gets, at this point in history. But that is a discussion for another time.)

We find the continued lapses of attention and what we see as politically-motivated misdirection concerning pit production at LANL from ANA and arms control groups shocking. We don't understand the cultural insensitivity to indigenous peoples either.

In our view, organizations are being "socially engineered" to align with Democrats in New Mexico and elsewhere, and to align with long-standing agendas to concentrate nuclear weapons (and inevitably, waste) activities in New Mexico.

We have been planning a national Zoom meeting on pit production on June 9 at 5 pm MDT. You can see more about this <u>here</u>. If you are on our mailing list (to subscribe, <u>send a blank email here</u>), you will get another reminder. As we <u>said</u>, for security's sake, there will be a required password. If you want to attend, please write me.

After that, we want to have a discussion about these issues with interested organizations. Let me know if you would like to be a part of that.

We don't want pit production. More than that, given the cascading crises we are entering -- about which we have been speaking urgently for more than two decades now -- we don't think pit production will be possible, or that the perceived need for pits is compatible with national survival (<u>slides 30-31</u>). We are deeply unimpressed with the compromises we hear from many groups that are searching for the "Goldilocks" level of pit production. There isn't one -- at least, not any desirable level greater than zero. The compromises of the arms control community have invariably <u>led to grief</u> over the past 25 years.

Sincerely,

Greg Mello, for the Los Alamos Study Group

For reference, the SRSW/UCS letter:

Dear Ms. Nelson:

The organizations listed below endorse and submit the following comments on the <u>Draft Environmental</u> <u>Impact Statement for Plutonium Pit Production at the Savannah River Site in South Carolina</u> and ask that these comments be made part of the official record.

We are concerned about the proposal to expand the role of the Savannah River Site (SRS) into the production of plutonium pits. SRS has no experience producing plutonium pits and this new mission will pose serious environmental, health and safety challenges. Pit production at the Rocky Flats Plant facility in Colorado was shut down in 1989 by a raid of the FBI and the Environmental Protection Agency. Pit production at Los Alamos was also forced to stop due to safety and security considerations.

With that in mind, we raise the following issues that need to be addressed in any final EIS:

- Pit production would produce a host of chemical and nuclear waste streams. Would any low-level
 nuclear waste be placed in unlined trenches at SRS? Do the waste figures in the draft EIS rely on
 information from earlier documents not related to pit production at SRS? If so, please provide new
 calculations based on pit production in the terminated MOX plant.
- What impacts would a plutonium fire have on the environment, front-line workers and downwind communities? As you know such a plutonium fire happened in the course of pit production at Rocky Flats. The people of Barnwell, SC and Shell Bluff, GA near SRS are primarily low income, disadvantaged, and people of color. What would happen to them in the event of a fire or accident?
- The United States has 15,000 or more pits in storage at DOE's Pantex site in TX. In addition, the
 Department of Energy does not have up-to-date, scientifically grounded information on the
 expected lifetime of plutonium pits. The most recent data from a 2007 JASON report showed pits
 would last a minimum of 100 years with appropriate care. The primary justification for pit production
 seems to be to produce new-design nuclear weapons, at great cost and considerable risk. Please
 discuss the comparative environmental, health, security and monetary risks and costs of producing
 new pits versus relying on the pits the United States already has.
- The SRS plan would repurpose the abandoned mixed oxide (MOX) plant, on which at least \$5 billion was spent, and which was cancelled due to rising cost estimates and amid allegations of high levels of required re-work due to poor quality construction. Please include a reliable, independently verified cost estimate for this project, and levels of confidence in that estimate.

We support preparation of an over-arching Programmatic Environmental Impact Statement (PEIS) which would examine the need for expanded pit production and the role in program support, pit design, pit production and waste handling at DOE sites across the country, including SRS, Los Alamos, Pantex, Y-12, the Waste Isolation Pilot Plant, Sandia, the Nevada Nuclear Security Site, and the Kansas City National Security Campus (which supplies non-nuclear components for all nuclear warheads). The PEIS must be completed before the final EIS on SRS pit production or the Supplement Analysis on pit production at Los Alamos are finalized. NNSA's plans for SRS and Los Alamos are inextricably linked and those plans should be reviewed in a single document, a PEIS.

Finally, we support the "no action alternative" whereby the poorly constructed MOX facility would not be converted to plutonium pit production and that this alternative not be linked to pit production at Los Alamos.

Please confirm receipt of these comments.

Sincerely,

Union of Concerned Scientists