

Formal Scoping Comment to the National Nuclear Security Administration on the Los Alamos Lab Site-Wide Environmental Impact Statement

October xxxx, 2022

Via LANLSWEIS@nnsa.doe.gov

Dear National Nuclear Security Administration:

Pursuant to National Environmental Policy Act (NEPA) requirements, the following issues should be analyzed and considered within the scope of the new Site-Wide Environmental Impact Statement for Continued Operations of the Los Alamos National Laboratory.

The last Los Alamos National Laboratory (LANL) Site-Wide Environmental Impact Statement (SWEIS) was completed in 2008 and is badly outdated. Since 2018 the National Nuclear Security Administration (NNSA), the Department of Energy's semi-autonomous nuclear weapons agency, has been aggressively expanding the production of plutonium "pit" bomb cores for nuclear weapons at the Lab.

On August 19, 2022, NNSA finally announced its intent to prepare a new LANL SWEIS, but apparently the agency will not address expanded plutonium pit production.¹ NNSA's legally dubious claim is that it performed the required NEPA analysis for expanded plutonium pit production in a 2008 Complex Transformation Programmatic Environmental Impact Statement, the 2008 LANL SWEIS and a woefully inadequate "Supplement Analysis" of the 2008 SWEIS completed in 2020. This last document concluded that a new SWEIS was not needed, after which NNSA issued an Amended Record of Decision expanding plutonium pit production at LANL to at least 30 pits per year.²

- First, NNSA needs to complete a new nation-wide programmatic environmental impact statement on expanded plutonium pit production instead of relying upon the 2008 Complex Transformation Programmatic Environmental Impact Statement. This begins with the fact that the 2008 PEIS never contemplated simultaneous plutonium pit production at two sites, that is LANL and the Savannah River Site in South Carolina.
- In addition, a new programmatic environmental impact statement must analyze the need for expanded pit production to begin with, which is not clear. Independent experts have concluded that pits have serviceable lifetimes of at least 100 years (their average age is now around 40). The U.S. already has at least 15,000 existing pits stored at the Pantex Plant near Amarillo, TX. Crucially, no future pit production is to maintain the safety and reliability of the existing nuclear stockpile. Instead, it is all for speculative future nuclear weapons designs

¹ See NNSA's August 19, 2022 *Notice of Intent To Prepare a Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory* at <https://www.federalregister.gov/documents/2022/08/19/2022-17901/notice-of-intent-to-prepare-a-site-wide-environmental-impact-statement-for-continued-operation-of>

It doesn't even mention expanded plutonium pit production.

² *Amended Record of Decision for the Site-Wide Environmental Impact Statement for the Continued Operation of Los Alamos National Laboratory, Los Alamos, NM, NNSA, Sept. 2, 2020*, <https://www.energy.gov/sites/default/files/2020/09/f78/amended-rod-eis-0380-LANL-SWEIS-2020-09-02.pdf>

that can't be tested because of the existing global testing moratorium, thereby potentially degrading confidence in stockpile reliability. Or, perhaps worse yet, it could prompt the U.S. to resume testing, which would have severe international proliferation consequences. Finally, expanded plutonium pit production will help fuel the new nuclear arms race. Thus, a new programmatic environmental impact statement should examine whether or not expanded plutonium pit production is the U.S.' best national security interests to begin with.

- A new LANL Site-Wide Environmental Impact Statement should then be “tiered” off the new programmatic environmental impact statement as encouraged by the National Environmental Policy Act. The new SWEIS must address the site-specific impacts of expanded plutonium pit production at the Lab, when there is a strong indication that it will not. NNSA’s argument that it sufficiently made that analysis in the 2020 Supplement Analysis is simply wrong. The planned expenditure of at least \$8 billion in plutonium facility upgrades, 2.4 million square feet of new construction over the next decade, and the unprecedented amount of offsite leasing for office space, all primarily driven by expanded plutonium pit production, need analysis in a new SWEIS. None of that was adequately analyzed (if at all) in the 2020 Supplement Analysis.
- NNSA has repeatedly refused to undertake a new programmatic environmental impact statement on expanded plutonium pit production, which is flat out wrong and the subject of existing citizen litigation.³ But irrespective of whether or not NNSA completes a new PEIS, the following issues should be analyzed in a new LANL SWEIS.
- LANL’s chronic history of nuclear safety incidences need analysis and resolution before expanding plutonium pit production. These concerns are serious enough that major operations at LANL’s main plutonium facility (“PF-4”) were halted for more than three years, yet nuclear safety incidences still occur.
- It is also not clear how expanded pit production can safely operate concurrently with other major plutonium programs at the aging PF-4 facility. This very much includes the emerging issue of pre-processing more than 40 metrics tons of excess plutonium for eventual disposal at the Waste Isolation Pilot Plant (WIPP). That needs full disclosure in a new LANL SWEIS.
- In addition, the new SWEIS needs to analyze PF-4’s capacity to sustain so-called surge production at 80 pits per year in the event that planned simultaneous pit production at the Savannah River Site is further delayed or perhaps even canceled.
- DOE’s calculated potential doses to workers and the public in its 2020 Supplement Analysis are orders of magnitude lower than those calculated by the independent Defense Nuclear Facilities Safety Board (some of which are lethal doses). It is generally acknowledged that risk analysis is at the heart of NEPA. This mismatch between the NNSA’s and the Safety Board’s potential dose calculations needs to be reconciled in the new SWEIS.

³ See Savannah River Site Watch, Tom Clements, The Gullah/Geechee Sea Island Coalition, Nuclear Watch New Mexico and Tri-Valley Communities Against A Radioactive Environment vs. NNSA at https://uploads-ssl.webflow.com/5f2c352f324853b8b51c50db/60dc9b018b2e81089b39ebb7_Complaint%20as%20filed.pdf

- LANL plans to intentionally vent up to 100,000 curies of gaseous radioactive tritium and possibly more over time. That deserves disclosure and analysis in a new draft SWEIS.
- The wildfire risk at the Laboratory is increasing due to climate change, occurring at rates that were not credited by DOE in the 2008 SWEIS. The effects of this accelerated change for human health and the environment require analysis in a new or supplemental SWEIS. DOE must also analyze the risks to health and the environment of its demonstrated and systematic failure to implement wildfire mitigation and protection measures which DOE had previously relied upon to support its conclusion in the 2008 SWEIS that it could adequately manage the risks of wildfires.
- The legal framework and timetable for cleanup of "legacy" hazardous and mixed waste pollution from LANL operations has drastically changed, with most contaminated areas' cleanup times going from no later than 2016 to no mandated deadline at all, and with DOE estimates for actual cleanup extending beyond 2036. Yet no analysis has been performed of the additional health risks and environmental consequences of ignoring these contaminants for an additional 20+ years.
- Further, the 2008 LANL SWEIS heavily relied upon the 2005 Consent Order negotiated with the New Mexico Environment Department (NMED). However, NMED has since sued DOE to terminate the revised 2016 Consent Order, thereby putting DOE's reliance upon it in serious jeopardy. In addition, the 2008 SWEIS did not substantively address what has since become recognized as the most serious and immediate environmental threat, which is hexavalent chromium contamination of the regional aquifer. The new SWEIS must address all of these cleanup issues.
- "Cleanup" needs to be defined. LANL plans to "cap and cover" some 200,000 cubic yards of radioactive and toxic wastes in unlined pits and trenches and call it cleaned up. The permanent threat to groundwater must be analyzed. Comprehensive cleanup, including waste exhumation and proper treatment, must be analyzed as a more than reasonable alternative.
- The environmental and public health dangers of per- and polyfluoroalkyl substances, or PFAS, are being increasingly recognized and may be subject to future regulation. The draft SWEIS should analyze and disclose what is likely extensive PFAS contamination at the Lab.
- In the 2008 SWEIS and 2020 Supplement Analysis DOE specifically relied upon the assertion that the Waste Isolation Pilot Plant will be available as a disposal site for all of the Laboratory's radioactive transuranic wastes, including the greatly increased plutonium waste streams that expanded pit production will inevitably produce. This assumption is inconsistent with existing facts (for example, as reported by the National Academy of Sciences), therefore DOE's reliance upon it lacks a legal foundation. Further, LANL's poor waste management practices led to a ruptured drum that closed WIPP for nearly three years, costing the American taxpayer some \$2 billion dollars to reopen in a still constrained fashion. The new SWEIS must address these and other radioactive and hazardous waste issues.
- The environmental effects of the contaminated runoff from Laboratory properties to the Rio Grande, and the increasing contamination of the regional aquifer, most notably with hexavalent chromium, were either inadequately considered or completely ignored in the 2008 SWEIS. Those facts, standing alone, would require a new or supplemental SWEIS, but the

need is exacerbated by the fact the Buckman Direct Diversion Project (BDD) now diverts water from the Rio Grande to supply the City of Santa Fe and Santa Fe County. DOE has simply failed to consider the consequences of expanded Laboratory operations on that essential water supply and how LANL could minimize the intake of Laboratory contaminants at the BDD, particularly in time of low flow, or alternately during high-flow events that can transport contaminants.

- A new SWEIS must analyze the planned demolition of the ~550,000 square feet Chemistry and Metallurgy Research Building. What is the schedule and where will the contaminated rubble go?
- The draft SWEIS must include analysis of the preservation of the Caja del Rio immediately to the east and south of the Lab. This includes any possible new electrical transmission lines and the idea of a new massive bridge spanning White Rock Canyon that has been floated a few times.
- The new SWEIS should contain updated seismic data and hazard analysis.
- The new SWEIS should certify that all facility safety bases are complete and up to date.
- Environmental justice issues stemming from increased pit production have been inadequately considered. As NNSA's 2020 LANL SWEIS Supplement Analysis documents, the population within the Laboratory's 50-mile radius "Region of Influence" is 68% minority. NNSA's plan to expand production both in total number of plutonium pits and increased radioactive and hazardous wastes along with significant safety and health concerns will saddle already-burdened communities with increased risks, which is in complete contravention to the President's Executive Order on Environmental Justice. Further, the new SWEIS should analyze the return of land to the San Ildefonso and Santa Clara Pueblos.

To summarize, first NNSA should complete a new nation-wide programmatic environmental impact statement on expanded plutonium pit production. A new LANL Site-Wide Environmental Impact Statement should then be "tiered" off of that document and address all of these issues outlined in these scoping comments, and in particular the site-specific impacts of expanded plutonium pit production. In the event that NNSA continues its arguably illegal behavior in not completing a new PEIS, a new LANL SWEIS should nevertheless analyze the issues outlined in these scoping comments, particularly expanded plutonium pit production.

Sincerely,

[name]

[City or Town, State]